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ABSTRACT

A study investigated key aspects of New York City's Workplace Education Program of the Central Labor Council for Worker Education in 15 union workplace literacy programs. The program enrolled 3,775 students and offered 215 classes in English as a Second Language (ESL), basic education (BED), and union-specific or skills programs. Within each type, classes were taught at various levels. The report contains an executive summary outlining the study's structure and presenting highlights of the findings. An introduction with a list of participating programs is followed by data tables and some narrative, on: (1) the demographic, educational, and employment characteristics of the students; (2) inter- and intra-union comparisons of the success of classes in meeting their objectives; (3) comparison of student contact hours in each course type; and (4) pre-to-posttest gain for each course type within each union. Notes are provided on the computer database used, and a narrative report assesses the effectiveness of staff training efforts for four designated union programs and in the central administration. (MSE) (Adjunct ERIC Clearinghouse on Literacy Education)

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EVALUATION REPORT

THE WORKPLACE EDUCATION PROGRAM
of
THE CENTRAL LABOR COUNCIL
and
THE CONSORTIUM FOR WORKER EDUCATION
(October 1, 1989 - June 30, 1990)

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(October 1, 1989 - June 30, 1990)

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Executive Summary

The present study is an evaluation and investigation of various key aspects of the Workplace Education Program of the Central Labor Council (CLC) for Worker Education. It is based on data obtained from 15 different Union Workplace literacy programs for the time period from October 1, 1989 to June 30, 1990.

The Program enrolled 3775 students and offered 215 different classes during the 1989-1990 time period. These classes can be broadly classified as being of three different types: English as a Second Language (ESL), Basic Education (BED) and Union Specific or Skills Programs. Within each of the three types, classes were taught at various levels. For example, the BED classes range from those that offered basic instruction in reading/writing up to GED classes for the attainment of a high school equivalency diploma. The Union Specific or Skills courses focused on the mastery of various job related literacy skills. Classes ranged in duration from 2 to 49 weeks and met from 4 to 40 hours per week.

The present evaluation study had five primary objectives:

(a) To describe various demographic, educational, and employment characteristics of the students.

(b) To statistically compare the three types of classes in terms of the relative frequency with which the student's objective for enrolling in a course was actually met. These analyses were conducted separately within each of the Unions, and across all of the Unions.

(c) To statistically compare the three types of classes in terms of the average number of student contact hours. Again, these analyses were conducted separately within each of the Unions, and across all of the Unions.

(d) To investigate the statistical significance of the gain from pre to post test for the various examinations administered to the students. These measures consisted primarily of the JOHN Test for the ESL classes, the TABE test for the BED classes, and various job related measures for the Union Specific Classes. The analysis of gains was performed separately within each of the Unions for each of the three class types.

(e) To evaluate the Staff training efforts for four designated Union programs (ILGWU, UAW/65, Teamsters Local 237, and ACTWU) as well as a menu of staff training activities for the central administrative staff which included ESL staff development, GED staff development, and a staff training conference comprising teacher-led workshops. This evaluation was conducted by interviewing the staff who design and conduct the

training, and by descriptively analyzing the evaluation forms completed by participants of staff training activities.

The data needed for the analyses described above were made available to the Evaluator by the Literacy Assistance Center (LAC). Using the ALLIES data base management system, the data generated by the Workplace Education Program are stored in three separate computer files: A Test file which contains the pre and post scores, an Impact file which contains information on contact hours and the achievement of objectives, and a Student file which contains background data. In order to statistically compare the three types of classes with respect to contact hours and the achievement of objectives, and to investigate the statistical significance of post-pre test gains, it was necessary to match the three data sets and structure the merged files in a form that could be accepted by various statistical data processing programs. To our knowledge, the present evaluation represented the first time in which an attempt was made to export the information contained in the ALLIES data base to an external statistical data processing program. Thus, the evaluation effort was also a test of the utility of the recently installed Allies data base. In some instances, difficulties were encountered in using the data base. These difficulties are described in later sections of the evaluation. The most important problem was that of incomplete or missing data. In interpreting some of the statistical results it is important to take into account this missing data issue. Our experiences suggest some improvements that can be made to the ALLIES system which will facilitate any future attempts to statistically analyze the data.

The demographic characteristics of the total student population are given as follows:

(1) approximately 60 percent of the students are female
(2) Nearly 40 percent of the students are high-school graduates (either earned in the U.S. or abroad)
(3) 6.7 percent of the students attended college
(4) On average, the students have achieved a grade level of 9.5
(5) 92.5 percent of the students are members of a minority group
(6) English is the primary language for only 35.3 percent of the students
(7) 91.4 percent of the students are currently employed. On average, students have been employed 6.4 years.
(8) Manufacturing and health care are the predominant fields of occupation with approximately 55 percent of the students in the former field and 20 percent in the latter.
(9) The average age of the students in 39.3.

In interpreting the results described in 1-9, it is important to note that for some of the demographic variables, the amount of missing data was over 50 percent.

Various statistical analyses were conducted to ascertain the relative frequency with which objectives were chosen, the rate at which the objectives were achieved, and to investigate how the odds of achieving an objective varied as a function of class type (ESL, GED, and Union specific). First, the proportion of students stating each objective was computed. Second, the proportion of individuals actually attaining each stated objective was computed. These first two analyses were computed for all class types and separately within each of the three types. Third, a cross tabulation of class type with attainment or non-attainment of an objective was constructed. This 3 by 2 table of frequencies was used to statistically investigate the relationship of the odds of achieving an objective to class type. Each of the three analyses was performed for the total population of students, and separately within each of the 15 union programs.

The major results of the analyses with respect to the achievement of class objectives were as follows:

(1) The overall rate of achievement for all students was 31 percent. This proportion is most likely an underestimate of the true achievement rate for two reasons. First, students who achieved objectives that were different from their initially stated objective were treated as not having achieved an objective. However, if this group is counted as achieving an objective, the overall achievement rate increases to a value of .47. Second, there were missing data for approximately 28 percent of the sample. All of these cases were treated as not having achieved an objective. However, it is reasonable to assume that for some of these students the objective was actually achieved but simply not recorded. If these cases could be identified, the achievement rate would increase.

(2) There was wide variability across the union programs with respect to the rate of achievement with the range being 0.0 to 95 percent.

(3) The cross tabulation of class type and the achievement or non-achievement of objectives showed a statistically significant relationship. The odds of achieving the stated objective were computed to be .84 for students in BED classes, .49 for students in Union Specific classes, and .18 for students in ESL classes. Thus, students in BED classes are most likely to achieve their stated course objective as compared to students in the other two class types. These odds are likely to be underestimates due to the data problems described in (1).

(4) Significant relationships between class type and the achievement of objectives was also found within five of the union programs. The form of this relationship varied across the programs.

The question of how average contact hours vary as a function of class type (ESL, BED, Union specific) was investigated using analysis of variance techniques. For all students combined, the average contact hours for each type of class were statistically compared. The same analysis was repeated within each union program for those unions offering more than one class type. In performing these analyses a relatively large amount of missing data was encountered. Of the N = 3775 students, contact hours were not recorded for N = 1357, slightly more than one third of the cases. The major results of the statistical analysis of contact hours were as follows:

(1) For the total group of students, statistically significant differences were found across the three class types with respect to the average contact hours. The averages for the BED, ESL and Union specific classes, were 70.3, 62.3, and 33.1 respectively.

(2) Significant differences across the three class types were also found for three of the union programs. The ranking of the three classes varied as a function of the program. For the District Council 1707 program, the average for BED classes (86.2) was significantly greater than the average for Union specific classes (49.4). For the ILGWU program, the ESL average (54.2) was significantly less than the Union specific average (63.2). For the Local 144 program the ESL average (117.2) was significantly greater than the average for BED classes(48.3).

Various tests were administered to students as both pre and post measures. For students enrolled in ESL classes the primary measures were the JOHN and Davis tests (scored on a 100 point scale). For the BED classes the primary tests were the TABE and CTBS (scored in grade equivalent units). The Union specific classes were administered various job related measures which were scored on various scales. For purposes of the analysis of gains, classes were designated as ESL, BED, and Union specific in terms of the type of test that was administered. ESL classes were those where the JOHN or Davis test were given. BED classes were those where the TABE or CTBS measures were administered. All other classes were designated as Union specific. In some instances this classification scheme produced some discrepancies with previous designations of class type. However, using the test as the basis of classification assured that all students classified as being in the same class type all were measured on the same type of test. Since pre and post tests were not

administered in all union programs, results were limited to nine programs. Statistically significant gains were evidenced for the following programs:

(1) ACTWU; District 65/UAW: Average gains exceeding one standard deviation unit for ESL classes.

(2) ACTWU; IBT Joint Council 16, Local 237: Average grade equivalent gains of .4 and .8 for BED classes

(3) Computer Classes; Hotel Trades Council; IBT Joint Council 16, Local 237: Gains exceeding nearly 1.5 standard deviation units for the Union specific classes

As previously noted, all of the statistical analyses presented in this study were based on student data obtained from the ALLIES data base management system with the aid of the Literacy Assistance Center. The data were contained in three different computer files (a) a Student file containing student demographic information (birth date, gender, ethnicity, educational background, employment information, primary language), union membership, and the student's objective for enrolling in courses, (b) an Impact file which contained information concerning the achievement of objectives (outcome), contact hours, class codes, and class type, (c) a Test file which contained pre and post scores as well as test and class codes. In order to analyze the achievement of objectives as well as the contact hours as a function of class type and union program, it was necessary to match the Impact file to the Student file. This matching was done through the use of a 10 character identification code available for each student. The resulting merged file contained N = 3775 cases. In order to analyze the post - pre score gains on various tests, it was necessary to match all of the pre score records in the Test file with all of the post score records. This matching was done both in terms of the student identification code and the test code. Since union membership was added to each record in the Test file, it was not necessary to match this file to either the Student or Impact file.

Various difficulties were encountered in matching the original data as well as in statistically analyzing the merged data sets. These difficulties involved the following issues: invalid entries, missing data, inaccurate data, and documentation. Some of the problems are rather minor in nature while others are more serious. Attention to these issues will greatly facilitate any future attempts to export the data from the ALLIES program and analyze it using various statistical packages. The introduction of a computerized data base management program represents an important step in developing more efficient and accurate procedures for documenting student progress. The Workplace Education Program is to be commended for implementing such a system rather that depending upon more informal recording systems. The criticisms we have raised concerning the data base are meant to be constructive in nature.

It is not surprising that a newly instituted system has need of some "fine tuning". It is felt that none of the criticisms require any major modifications in the current system.

An evaluation was made of the teacher training programs of four Union education programs affiliated with the Consortium for Worker Education, as well as of three workshops and one conference centrally sponsored by the Consortium. Information for the evaluation was obtained from interviews with staff members of the four Unions, and with the Consortium director, as well as from evaluation forms returned by the participants in the workshops and conference. This evaluation represents the first in-depth analysis of the Consortium's staff training efforts to date. Extensive staff training and curriculum development activities are documented. As a group the unions studied have put much thought and effort into the following activities: staff training, self-analysis of these efforts, and ongoing activities to improve their teacher training initiatives. In many instances this report serves to systematically describe insights and recommendations derived by Consortium personnel themselves.

The teacher training programs are seen by the staffs to be a major and integral part of their programs, and they devote large proportions of their time to them. This focus stems partly from the part-time commitment of most teachers to the programs, as well as to the isolation created by widely scattered sites for classes. A more dominant reason concerns the Consortium's emphasis on a student-centered, holistic-language orientation in education programs which are built on student needs. This necessitates considerable staff development as well as continuing teacher support in the classroom. The staff members interviewed showed a strong commitment to the Consortium's educational philosophy and have developed effective and well-organized multilevel teacher training programs to implement that approach. The staff development effort at each of the unions is informed by the overall Consortium philosophy. However, the constituency, the staff, and course offerings, differ from union to union. Each program has initiated a staff development program consistent with its needs. In each of the programs the staff had a realistic estimate of the strengths and weaknesses of their training programs, as well as plans for improved procedures for the coming year.

Some of the major concerns raised were the development of strategies to integrate the technical and language-arts curricula in the team-taught programs, and provision for more teacher communication and peer collaboration. Another issue to be addressed is the definition of the roles of students and teachers in a student-centered curriculum.

The three Consortium sponsored workshops and conference received generally favorable comments from participants. Most appreciated were the presentation of new procedures and materials, the opportunity for participants to exchange ideas, and the demonstration of collaborative learning approaches. The staff felt that the mix of students and teachers at the workshops and conference was beneficial to both, and that participants

gained insight into the philosophy and goals of the Consortium. Participants asked that demonstration workshops on new techniques be extended to show how they could be more useable in individual classes, as well as requesting in-class support if those techniques were to be implemented in their classes.

In conclusion, the staff development programs described here have resulted from collaborative planning, tryout, and revision of multi-level activities and curriculum, as well as from continual dialogue among members of the staff as to the best representation of literacy experiences for their students. Their considerable efforts have produced staff development programs that are expected to evolve even more as both their students and teachers take more active roles in the literacy learning process. Although there are still issues to be resolved and activities to be made more effective, the strength of the work of the staff members is clearly seen in the documentation presented in the report. Staff members of the Consortium for Worker Education are to be commended for their innovative efforts in attempting to create a learning environment in which both teachers and students may thrive.

1. Introduction

The present study is an evaluation and investigation of various key aspects of the Workplace Education Program of the Central Labor Council (CLC) for Worker Education. It is based on data obtained from 15 different Union Workplace literacy programs for the time period from October 1, 1989 to June 30, 1990. The study is the third evaluation of the Worker Education Program which has been conducted by the Center for Advanced Study of Education of the Graduate Center of the City University of New York. The earlier evaluations provided descriptive information concerning the workings of the Program and also offered recommendations with respect to the development of a computerized data management system. The present study focused on a statistical analysis of the data base.

The 15 participating programs are listed below:

ACTWU - Amalgamated Clothing and Textile Worker's Union

Computer Classes - Computer Applications Program

District 65/UAW - United Auto Workers, District 65

District Council 1707 - American Federation of State, County, and Municipal Employees

Hotel Trades Council - Industry Training Program of the Hotel/Motel Trades Council

IBT Jt. Coun. Local 237 - Teamsters Local 237

ILA Local 1814 - Internation Longshoreman's Association, Local 1814

ILGWU - International Ladies Garment Worker's Union

IUOE Local 30 - International Union of Operating Engineers, Local 30

Joint Appren. Tr. - Joint Apprentice Training Committee of the Elevator Industry

Local 144 - Service Employees International Union, Local 144

Local 1199 - Drug, Hospital, and Health Care Employees, Local 1199

Sky Chef

UAW Local 365 - United Auto Workers, Local 365

UFCW Local 342-50 - United Food and Commercial Workers' Union, Local 342-50

The entire program enrolled 3775 students and offered 215 different classes during the 1989-1990 time period. These classes can be broadly classified as being of three different types: English as a Second Language (ESL), Basic Education (BED) and Union Specific or Skills Programs. Within each of the three types, classes were taught at various levels. For example, the BED classes range from those that offered basic instruction in reading/writing up to GED classes for the attainment of a high school equivalency diploma. The Union Specific or Skills courses focused on the mastery of various job related literacy skills. Classes ranged in duration from 2 to 49 weeks and met from 4 to 40 hours per week.

At the request of the Workplace Education Program, the present evaluation study had five primary objectives:

(a) To describe various demographic, educational, and employment characteristics of the students.

(b) To statistically compare the three types of classes in terms of the relative frequency with which the student's objective for enrolling in a course was actually met. These analyses were conducted separately within each of the Unions, and across all of the Unions.

(c) To statistically compare the three types of classes in terms of the average number of student contact hours. Again, these analyses were conducted separately within each of the Unions, and across all of the Unions.

(d) To investigate the statistical significance of the gain from pre to post test for the various examinations administered to the students. These measures consisted primarily of the JOHN Test for the ESL classes, the TABE test for the BED classes, and various job related measures for the Union Specific Classes. The analysis of gains was performed separately within each of the Unions for each of the three class types.

(e) To evaluate the Staff training efforts for four designated Union programs (ILGWU, UAW/65, Teamsters Local 237, and ACTWU) as well as a menu of staff training activities for the central administrative staff which included ESL staff development, GED staff development, and a staff training conference comprising teacher-led workshops. This evaluation was conducted

by interviewing the staff who design and conduct the training, and by descriptively analyzing the evaluation forms completed by participants of staff training activities.

The data needed for the analyses described in (a)-(e) above were made available to the Evaluator by the Literacy Assistance Center (LAC). Using the ALLIES data base management system, the data generated by the Workplace Education Program are stored in three separate computer files: A Test file which contains the pre and post scores, an Impact file which contains information on contact hours and the achievement of objectives, and a Student file which contains background data. In order to statistically compare the three types of classes with respect to contact hours and the achievement of objectives, and to investigate the statistical significance of post-pre test gains, it was necessary to merge the three data sets and structure the resulting files in a form that could be accepted by various statistical data processing programs. To our knowledge, the present evaluation represented the first time in which an attempt was made to export the information contained in the ALLIES data base to an external statistical data processing program. Thus, the evaluation effort was also a test of the utility of the recently installed Allies data base. In some instances, difficulties were encountered in using the data base. Our experiences suggest some improvements that can be made to the ALLIES system which will facilitate any future attempts to statistically analyze the data.

Section 2 of the report describes various demographic, educational, and employment characteristics of the students. This information is provided in terms of proportions, means, and standard deviations. The reports are presented for the entire set of students and separately for each participating Union program. Section 3 presents a statistical comparison of the three types of classes with respect to the achievement of educational objectives by the students. The fourth section describes the statistical comparison of the three class types in terms of the number of contact hours. The analyses in Sections 3 and 4 are presented both for the entire group of students, and separately within each Union. Section 5 describes the statistical analysis of the post-pre score gains. The sixth section of the report describes the difficulties that were encountered in merging the three data files and offers some recommendations for revisions of the data base management system. The seventh section contains an evaluation of the staff training efforts. This report was prepared by Dr. Shirley Feldmann of the City University of New York.

2. Background Characteristics of Students

Tables 1A to 1P present data on the following student characteristics:

(a) gender
(b) whether the student graduated high-school
(c) whether the student attended college
(d) ethnicity
(e) whether English is the primary language
(d) whether the student is currently employed
(e) type of occupation
(f) age
(g) highest school year achieved
(i) number of years employed

Table 1A provides the above information for all N = 3775 students contained in the Student file. Tables 1B to 1P present this information separately for each of 15 different union programs.

TABLE 1A
Demographics For All Students (N=3775)

Variable	N Responding	Percentage of respondents
Gender	3730	
Male		39.9
Female		60.1
High School Grad.	2138	39.9
College	1977	6.7
Ethnicity	2803	
American Indian		.6
Black		27.4
Asian		17.8
Hispanic		46.6
White (other)		7.5
Primary Language	2859	
English		35.3
Other		64.7
Employment Status	2566	
Employed		91.4
Unemployed		8.6
Employment Code	1816	
A-Agriculture/Mining		.9
B-Construction		.7
C-Manufacturing		55.5
D-Transp./Commu./Util.		.5
E-Wholesale Trade		.2
F-Retail Trade		.2
G-Finance/Insur./Real Estate		.2
H-Srvc. to Busin.		1.5
I-Srvc. to Indiv.		4.5
J-Public Serv.		12.3
K-Health Care		21.5
L-Government		.6
M-Other		1.5

Variable	Mean	Stand Dev.	N responding
Age	39.3	11.5	3775
Grade Achieved	9.5	3.2	1735
Years with Current Employer	6.4	6.4	760

TABLE 1B
Demographics For ACTWU (N=261)

Variable	N Responding	Percentage of respondents
Gender	261	
Male		24.9
Female		75.1
High School Grad.	246	5.7
College	246	1.6
Ethnicity	261	
American Indian		0.0
Black		0.0
Asian		0.0
Hispanic		100.0
White (other)		0.0
Primary Language	0	
English		-
Other		-
Employment Status	261	
Employed		91.6
Unemployed		8.4
Employment Code	71	
A-Agriculture/Mining		0.0
B-Construction		4.2
C-Manufacturing		78.9
D-Transp./Commu./Util.		0.0
E-Wholesale Trade		1.4
F-Retail Trade		0.0
G-Finance/Insur./Real Estate		0.0
H-Srvc. to Busin.		1.4
I-Srvc. to Indiv.		1.4
J-Public Serv.		0.0
K-Health Care		5.6
L-Government		0.0
M-Other		7.0

Variable	Mean	Stand Dev.	N responding
Age	39.1	14.3	261
Grade Achieved	5.5	3.4	244
Years with Current Employer	3.5	3.6	31

TABLE 1C
Demographics For Computer Classes (N=207)

Variable	N Responding	Percentage of respondents
Gender	202	
Male		21.8
Female		78.2
High School Grad.	164	86.0
College	135	48.1
Ethnicity	169	
American Indian		1.8
Black		47.3
Asian		4.1
Hispanic		34.9
White (other)		11.8
Primary Language	198	
English		71.7
Other		28.3
Employment Status	170	
Employed		89.4
Unemployed		10.6
Employment Code	128	
A-Agriculture/Mining		0.0
B-Construction		0.0
C-Manufacturing		5.5
D-Transp./Commu./Util.		0.0
E-Wholesale Trade		0.0
F-Retail Trade		1.6
G-Finance/Insur./Real Estate		1.6
H-Srvc. to Busin.		3.1
I-Srvc. to Indiv.		8.6
J-Public Serv.		3.9
K-Health Care		64.8
L-Government		2.3
M-Other		8.6

Variable	Mean	Stand Dev.	N responding
Age	41.8	11.7	207
Grade Achieved	11.2	1.9	90
Years with Current Employer	9.6	7.8	126

TABLE 1D
Demographics For District 65/UAW (N=371)

Variable	N Responding	Percentage of respondents
Gender	371	
Male		35.6
Female		64.4
High School Grad.	350	25.1
College	338	8.9
Ethnicity	371	
American Indian		.3
Black		7.0
Asian		0.0
Hispanic		91.9
White (other)		.8
Primary Language	331	
English		8.8
Other		91.2
Employment Status	371	
Employed		65.2
Unemployed		34.8
Employment Code	212	
A-Agriculture/Mining		.5
B-Construction		3.3
C-Manufacturing		80.2
D-Transp./Commu./Util.		1.4
E-Wholesale Trade		1.4
F-Retail Trade		.9
G-Finance/Insur./Real Estate		0.0
H-Srvc. to Busin.		3.3
I-Srvc. to Indiv.		6.1
J-Public Serv.		.5
K-Health Care		0.0
L-Government		0.0
M-Other		2.4

Variable	Mean	Stand Dev.	N responding
Age	35.3	10.7	37
Grade Achieved	8.7	3.2	327
Years with Current Employer	5.0	5.1	95

TABLE 1E
Demographics For District Council 1707 (N=309)

Variable	N Responding	Percentage of respondents
Gender	304	
Male		46.4
Female		53.6
High School Grad.	206	36.9
College	167	10.8
Ethnicity	233	
American Indian		0.0
Black		71.2
Asian		.4
Hispanic		27.5
White (other)		.9
Primary Language	123	
English		40.7
Other		59.3
Employment Status	89	
Employed		66.3
Unemployed		33.7
Employment Code	36	
A-Agriculture/Mining		0.0
B-Construction		0.0
C-Manufacturing		0.0
D-Transp./Commu./Util.		0.0
E-Wholesale Trade		0.0
F-Retail Trade		0.0
G-Finance/Insur./Real Estate		0.0
H-Srvc. to Busin.		0.0
I-Srvc. to Indiv.		2.8
J-Public Serv.		0.0
K-Health Care		94.4
L-Government		2.8
M-Other		0.0

Variable	Mean	Stand Dev.	N responding
Age	42.0	11.3	309
Grade Achieved	9.5	2.9	183
Years with Current Employer	4.0	2.2	7

TABLE 1F
Demographics For Hotel Trades Council (N=115)

Variable	N Responding	Percentage of respondents
Gender	115	
Male		46.1
Female		53.9
High School Grad.	106	71.7
College	89	18.0
Ethnicity	115	
American Indian		1.7
Black		49.6
Asian		7.0
Hispanic		31.3
White (other)		10.4
Primary Language	111	
English		45.0
Other		55.0
Employment Status	115	
Employed		99.1
Unemployed		.9
Employment Code	45	
A-Agriculture/Mining		-
B-Construction		-
C-Manufacturing		-
D-Transp./Commu./Util.		-
E-Wholesale Trade		-
F-Retail Trade		-
G-Finance/Insur./Real Estate		-
H-Srvc. to Busin.		-
I-Srvc. to Indiv.		100.0
J-Public Serv.		-
K-Health Care		-
L-Government		-
M-Other		-

Variable	Mean	Stand Dev.	N responding
Age	38.6	10.4	115
Grade Achieved	11.1	2.3	114
Years with Current Employer	4.9	4.6	62

TABLE 1G
Demographics For Hotel IBT Joint Council 16, Local 237 (N=849)

Variable	N Responding	Percentage of respondents
Gender	836	
Male		69.9
Female		30.1
High School Grad.	303	62.0
College	287	12.9
Ethnicity	397	
American Indian		1.5
Black		52.6
Asian		1.3
Hispanic		39.8
White (other)		4.8
Primary Language	612	
English		73.4
Other		26.6
Employment Status	380	
Employed		100.0
Unemployed		0.0
Employment Code	310	
A-Agriculture/Mining		1.0
B-Construction		0.0
C-Manufacturing		17.1
D-Transp./Commu./Util.		0.0
E-Wholesale Trade		0.0
F-Retail Trade		0.0
G-Finance/Insur./Real Estate		0.0
H-Srvc. to Busin.		0.0
I-Srvc. to Indiv.		0.0
J-Public Serv.		66.5
K-Health Care		15.5
L-Government		0.0
M-Other		0.0

Variable	Mean	Stand Dev.	N responding
Age	37.7	10.2	849
Grade Achieved	11.3	1.3	306
Years with Current Employer	8.0	7.6	105

TABLE 1H
Demographics For ILA Local 1814 (N=70)

Variable	N Responding	Percentage of respondents
Gender	69	
Male		78.3
Female		21.7
High School Grad.	13	30.8
College	8	0.0
Ethnicity	63	
American Indian		0.0
Black		12.7
Asian		0.0
Hispanic		46.0
White (other)		41.3
Primary Language	69	
English		47.8
Other		52.2
Employment Status	61	
Employed		96.7
Unemployed		3.3
Employment Code	0	
A-Agriculture/Mining		-
B-Construction		-
C-Manufacturing		-
D-Transp./Commu./Util.		-
E-Wholesale Trade		-
F-Retail Trade		-
G-Finance/Insur./Real Estate		-
H-Srvc. to Busin.		-
I-Srvc. to Indiv.		-
J-Public Serv.		-
K-Health Care		-
L-Government		-
M-Other		-

Variable	Mean	Stand Dev.	N responding
Age	43.6	15.0	70
Grade Achieved	9.2	4.8	5
Years with Current Employer	15.3	13.1	3

TABLE II
Demographics For ILGWU (N=738)

Variable	N Responding	Percentage of respondents
Gender	738	
Male		13.7
Female		86.3
High School Grad.	335	11.6
College	335	2.4
Ethnicity	738	
American Indian		.3
Black		.5
Asian		62.2
Hispanic		35.8
White (other)		1.2
Primary Language	732	
English		1.0
Other		99.0
Employment Status	738	
Employed		99.9
Unemployed		.1
Employment Code	722	
A-Agriculture/Mining		1.7
B-Construction		0.0
C-Manufacturing		98.3
D-Transp./Commu./Util.		0.0
E-Wholesale Trade		0.0
F-Retail Trade		0.0
G-Finance/Insur./Real Estate		0.0
H-Srvc. to Busin.		0.0
I-Srvc. to Indiv.		0.0
J-Public Serv.		0.0
K-Health Care		0.0
L-Government		0.0
M-Other		0.0

Variable	Mean	Stand Dev.	N responding
Age	41.4	12.4	738
Grade Achieved	9.4	3.3	116
Years with Current Employer	2.4	2.2	11

TABLE 1J
Demographics For IUOE Local 30 (N=44)

Variable	N Responding	Percentage of respondents
Gender	44	
Male		97.7
Female		2.3
High School Grad.	41	92.7
College	36	36.1
Ethnicity	44	
American Indian		2.3
Black		11.4
Asian		2.3
Hispanic		2.3
White (other)		81.8
Primary Language	44	
English		100.0
Other		0.0
Employment Status	40	
Employed		97.5
Unemployed		2.5
Employment Code	35	
A-Agriculture/Mining		0.0
B-Construction		0.0
C-Manufacturing		2.9
D-Transp./Commu./Util.		5.7
E-Wholesale Trade		0.0
F-Retail Trade		0.0
G-Finance/Insur./Real Estate		0.0
H-Srvc. to Busin.		22.9
I-Srvc. to Indiv.		11.4
J-Public Serv.		22.9
K-Health Care		5.7
L-Government		14.3
M-Other		14.3

Variable	Mean	Stand Dev.	N responding
Age	29.3	8.7	44
Grade Achieved	12.0	.8	34
Years with Current Employer	2.2	1.5	29

TABLE 1K
Demographics For Joint Apprentice Training (N=49)

Variable	N Responding	Percentage of respondents
Gender	49	
Male		100.0
Female		0.0
High School Grad.	47	71.4
College	42	22.4
Ethnicity	49	
American Indian		2.0
Black		12.2
Asian		2.0
Hispanic		26.5
White (other)		57.1
Primary Language	43	
English		88.4
Other		11.6
Employment Status	49	
Employed		95.9
Unemployed		4.1
Employment Code	0	
A-Agriculture/Mining		-
B-Construction		-
C-Manufacturing		-
D-Transp./Commu./Util.		-
E-Wholesale Trade		-
F-Retail Trade		-
G-Finance/Insur./Real Estate		-
H-Srvc. to Busin.		-
I-Srvc. to Indiv.		-
J-Public Serv.		-
K-Health Care		-
L-Government		-
M-Other		-

Variable	Mean	Stand Dev.	N responding
Age	26.7	6.3	49
Grade Achieved	11.6	.7	45
Years with Current Employer	1.3	.9	37

TABLE 1L
Demographics For Local 144 (N=217)

Variable	N Responding	Percentage of respondents
Gender	217	
Male		14.3
Female		85.7
High School Grad.	217	48.4
College	217	16.6
Ethnicity	217	
American Indian		.9
Black		77.4
Asian		3.7
Hispanic		12.4
White (other)		5.5
Primary Language	217	
English		63.6
Other		36.4
Employment Status	217	
Employed		94.9
Unemployed		5.1
Employment Code	212	
A-Agriculture/Mining		0.0
B-Construction		.5
C-Manufacturing		0.0
D-Transp./Commu./Util.		.9
E-Wholesale Trade		0.0
F-Retail Trade		0.0
G-Finance/Insur./Real Estate		.5
H-Srvc. to Busin.		.5
I-Srvc. to Indiv.		.9
J-Public Serv.		0.0
K-Health Care		96.2
L-Government		.5
M-Other		0.0

Variable	Mean	Stand Dev.	N responding
Age	42.2	10.3	217
Grade Achieved	10.1	2.5	215
Years with Current Employer	7.1	6.0	215

TABLE 1M
Demographics For Local 1199 (N=19)

Variable	N Responding	Percentage of respondents
Gender	19	
Male		5.3
Female		94.7
High School Grad.	18	44.4
College	18	16.7
Ethnicity	19	
American Indian		0.0
Black		36.8
Asian		5.3
Hispanic		47.4
White (other)		10.5
Primary Language	19	
English		0.0
Other		100.0
Employment Status	19	
Employed		84.2
Unemployed		15.8
Employment Code	15	
A-Agriculture/Mining		0.0
B-Construction		0.0
C-Manufacturing		20.0
D-Transp./Commu./Util.		0.0
E-Wholesale Trade		0.0
F-Retail Trade		0.0
G-Finance/Insur./Real Estate		0.0
H-Srvc. to Busin.		0.0
I-Srvc. to Indiv.		20.0
J-Public Serv.		0.0
K-Health Care		60.0
L-Government		0.0
M-Other		0.0

Variable	Mean	Stand Dev.	N responding
Age	43.3	10.3	19
Grade Achieved	11.7	1.0	9
Years with Current Employer	4.6	2.6	14

TABLE 1N
Demographics For Sky Chef (N=27)

Variable	N Responding	Percentage of respondents
Gender	26	
Male		34.6
Female		65.4
High School Grad.	15	93.3
College	6	66.7
Ethnicity	21	
American Indian		0.0
Black		0.0
Asian		0.0
Hispanic		100.0
White (other)		0.0
Primary Language	22	
English		4.5
Other		95.5
Employment Status	18	
Employed		100.0
Unemployed		0.0
Employment Code	8	
A-Agriculture/Mining		0.0
B-Construction		12.5
C-Manufacturing		0.0
D-Transp./Commu./Util.		12.5
E-Wholesale Trade		0.0
F-Retail Trade		0.0
G-Finance/Insur./Real Estate		0.0
H-Srvc. to Busin.		75.5
I-Srvc. to Indiv.		0.0
J-Public Serv.		0.0
K-Health Care		0.0
L-Government		0.0
M-Other		0.0

Variable	Mean	Stand Dev.	N responding
Age	37.0	9.8	27
Grade Achieved	-	-	1
Years with Current Employer	3.5	3.3	8

TABLE 10
Demographics For UAW Local 365 (N=36)

Variable	N Responding	Percentage of respondents
Gender	30	
Male		40.0
Female		60.0
High School Grad.	0	-
College	0	-
Ethnicity	24	
American Indian		0.0
Black		0.0
Asian		12.5
Hispanic		87.5
White (other)		0.0
Primary Language	26	
English		0.0
Other		100.0
Employment Status	0	
Employed		-
Unemployed		-
Employment Code	28	
A-Agriculture/Mining		0.0
B-Construction		0.0
C-Manufacturing		100.0
D-Transp./Commu./Util.		0.0
E-Wholesale Trade		0.0
F-Retail Trade		0.0
G-Finance/Insur./Real Estate		0.0
H-Srvc. to Busin.		0.0
I-Srvc. to Indiv.		0.0
J-Public Serv.		0.0
K-Health Care		0.0
L-Government		0.0
M-Other		0.0

Variable	Mean	Stand Dev.	N responding
Age	38.8	10.6	36
Grade Achieved	-	-	0
Years with Current Employer	-	-	0

TABLE 1P
Demographics For UFCW Local 342-50 (N=45)

Variable	N Responding	Percentage of respondents
Gender	40	
Male		20.0
Female		80.0
High School Grad.	19	0.0
College	1	0.0
Ethnicity	43	
American Indian		0.0
Black		18.6
Asian		7.0
Hispanic		20.9
White (other)		53.5
Primary Language	45	
English		24.4
Other		75.6
Employment Status	0	
Employed		-
Unemployed		-
Employment Code	0	
A-Agriculture/Mining		-
B-Construction		-
C-Manufacturing		-
D-Transp./Commu./Util.		-
E-Wholesale Trade		-
F-Retail Trade		-
G-Finance/Insur./Real Estate		-
H-Srvc. to Busin.		-
I-Srvc. to Indiv.		-
J-Public Serv.		-
K-Health Care		-
L-Government		-
M-Other		-

Variable	Mean	Stand Dev.	N responding
Age	43.1	11.2	45
Grade Achieved	-	-	0
Years with Current Employer	-	-	0

An examination of Table 1A for the entire student population shows the following results:

(1) approximately 60 percent of the students are female
(2) Nearly 40 percent of the students are high-school graduates (either earned in the U.S. or abroad)
(3) 6.7 percent of the students attended college
(4) On average, the students have achieved a grade level of 9.5
(5) 92.5 percent of the students are members of a minority group
(6) English is the primary language for only 35.3 percent of the students
(7) 91.4 percent of the students are currently employed. On average, students have been employed 6.4 years in their current job.
(8) Manufacturing and health care are the predominant fields of occupation with approximately 55 percent of the students in the former field and 20 percent in the latter.
(9) The average age of the students in 39.3.

By examining the student characteristics separately for each of the unions (Tables 1B - 1P) it is seen that there is a large degree of variability for some of the measures. For example, the percentage of students attaining a high school diploma ranges from lows of 0.0 and 5.7 percent for UFCW Local 342-50 and ACTWU respectively, to highs of 92.7 and 93.3 percent for IUOE Local 30 and Sky Chef. Another measure showing rather large variability across the unions is the percentage of students for whom English is the primary language; the range is from lows of 0.0 percent (Local 1199 and UAW Local 365) and 1.0 percent (ILGWU), to highs of 88.4 percent (Joint Apprentice Training) and 100.0 percent (IUOE Local 30).

It should also be noted that except for the gender and age variables, there is a considerable amount of missing data for the background variables. For example, only N = 2138 students out of a total of N = 3775 responded to the question concerning high school education. Consequently, the descriptive analyses reported in Tables 1A to 1P should be viewed as somewhat tentative. In Section 6 the issue of missing data is discussed in detail together with some recommendations for improvement.

3. The Statistical Analysis of Course Objectives as a Function of Class Type

Each student was asked to state a single primary objective for enrolling in a class. The following were the possible choices:

(a) GED Preparation
(b) ESL/Citizenship
(c) ESL/Legalization
(d) Learn English
(e) Prepare for a job
(f) Prepare for a better job
(g) Update current job skills
(h) Fulfill certification requirements
(i) Increase read/writ skills
(j) College Preparation
(k) Self enrichment/Improvement

Various statistical analyses were conducted to ascertain the relative frequency with which objectives were chosen, the rate at which the objectives were achieved, and to investigate how the odds of achieving an objective varied as a function of class type (ESL, GED, and Union specific). First, the proportion of students stating each objective was computed. Second, the proportion of individuals actually attaining each stated objective was computed. These first two analyses were computed for all class types and separately within each of the three types. Third, a cross tabulation of class type with attainment or non-attainment of an objective was constructed. This 3 by 2 table of frequencies was used to statistically investigate the relationship of the odds of achieving an objective to class type. Each of the three analyses was performed for the total population of students, and separately within each of the 15 union programs. Table 2A contains the results for all students. Tables 2B to 2P present the separate union results. Table 2Q summarizes the overall rate of achievement of objectives for each union program separately.

Consider Table 2A containing the results for all N = 3775 students. The table is broken down into five sections. The first section describes the results for all students regardless of class type. The first column describes the proportion of students choosing each objective. The second column presents the proportion of students who stated an objective who actually achieved the objective. The second section of Table 2A presents results only for students enrolled in ESL classes. The third section pertains to students enrolled in BED classes. Section 4 pertains to students enrolled in Union Specific classes. The fifth section presents a 3 by 2 cross tabulation of class type with a binary variable (objective not achieved, objective achieved). The binary achievement variable was constructed by simply noting whether a student achieved the stated objective (regardless of which objective it was) or did not achieve the

stated objective. Using this cross tabulation, the statistical relationship of class type to achievement of objective was tested using a Chi Square test of significance with 2 degrees of freedom.

Before considering the results in Table 2A, it is important to note some missing data problems which were encountered in computing the various statistics appearing in the table. It should be noted that these problems are also present in Tables 2B to 2Q for the separate union programs.

The first problem was that of classifying a course taken by a student as being ESL, BED, or Union specific. Ostensibly this designation could be readily done since class type was available from the Impact computer file obtained from the ALLIES data base. However, the Impact file did not contain N = 1179 of the N = 3775 students appearing in the Student computer file. Due to these missing Impact records, it was not possible to match all the records in the Student file with those in the Impact file. For the unmatched students, class type was unknown. An attempt was then made to identify class type by using the variables union membership, and class code, both of which were assumed to be available from the Student file. Unfortunately, the union code was missing for N = 634 cases, and the class codes were not consistently spelled. As a result of these difficulties, class type could be identified for only N = 3259 of the N = 3775 students. Thus, whereas there is a total of N=3775 students, 993 were classified as ESL, 741 as Bed, and 1525 as Union specific, where 993 + 741 + 1525 = 3259.

A second problem concerns the manner in which an objective was designated as not being achieved. For the N = 3259 students for whom class type was identified, only N = 995 achieved their stated objective. Of the N = 2264 "non-achievers", N = 794 were simply missing from the Impact file, N = 927 had a "blank" recorded, and N = 543 achieved objectives which did not match the originally stated objective. It is not clear whether all N =2264 cases represent the failure to achieve an objective or the failure to record the data. For example, one might reasonably argue that the N = 543 students who achieved an objective different from their stated objective should still be considered as "positive" outcomes. Consequently, the achievement of objective rates given in Tables 2A to 2P may underestimate the true rates. This entire issue of treating missing or mismatched data and blanks as "negative responses" will be discussed in greater detail in Section 6 together with additional issues.

TABLE 2A
Student Performance In Terms of Achievement of Objectives
All Students

1. All Classes (N=3775) (Nclasses=215)

Objective	% Stating Objective	% Stating Objective who Achieve Objective
A-Ged Preparation	7.9	13.8
B-ESL/Citizenship	8.4	6.9
C-ESL/Legalization	.3	20.0
D-Learn English	19.3	17.8
E-Prepare for a Job	1.5	59.6
F-Prepare Better Job	46.1	23.7
G-Update Current Job Skills	5.5	78.6
H-Fulfill Certif. Req.	2.3	96.6
I-Increase Read/Writ Skills	3.4	86.8
J-College Preparation	1.9	24.7
K-Self Enrichment/Improve.	1.1	66.7
--No Objective Stated	2.3	

2. ESL Classes (N=993) (Nclasses=61)

Objective	% Stating Objective	% Stating Objective who Achieve Objective
A-Ged Preparation	.4	25.0
B-ESL/Citizenship	31.3	7.1
C-ESL/Legalization	.8	25.0
D-Learn English	60.2	16.7
E-Prepare for a Job	2.9	37.9
F-Prepare Better Job	1.5	20.0
G-Update Current Job Skills	.1	0.0
H-Fulfill Certif. Req.	.1	0.0
I-Increase Read/Writ Skills	1.0	70.0
J-College Preparation	.5	20.0
K-Self Enrichment/Improve.	.7	71.4
--No Objective Stated	.4	

3. Basic Education Classes (N=741) (Nclasses=51)

Objective	% Stating Objective	% Stating Objective who Achieve Objective
A-Ged Preparation	37.5	13.3
B-ESL/Citizenship	0.0	-
C-ESL/Legalization	0.0	-
D-Learn English	.9	57.1
E-Prepare for a Job	.3	0.0
F-Prepare Better Job	30.2	63.8
G-Update Current Job Skills	4.9	77.8
H-Fulfill Certif. Req.	.1	100.0
I-Increase Read/Writ Skills	13.5	88.0
J-College Preparation	8.6	26.6
K-Self Enrichment/Improve.	3.9	72.4
--No Objective Stated	0.0	

4. Union Specific Classes (N=1525) (Nclasses=103)

Objective	% Stating Objective	% Stating Objective who Achieve Objective
A-Ged Preparation	.1	0.0
B-ESL/Citizenship	.2	0.0
C-ESL/Legalization	.1	0.0
D-Learn English	6.1	28.0
E-Prepare for a Job	1.7	88.5
F-Prepare Better Job	70.8	22.5
G-Update Current Job Skills	9.8	84.7
H-Fulfill Certif. Req.	5.6	97.6
I-Increase Read/Writ Skills	.1	0.0
J-College Preparation	.2	0.0
K-Self Enrichment/Improve.	.3	50.0
--No Objective Stated	4.9	

5. The Overall Relationship of Type of Class and Achievement of Objective

Class Type	Objective Not Achieved	Objective Achieved	Total
ESL	N= 841	N= 152	993
Basic Educ.	N= 402	N= 339	741
Union Specific	N=1021	N= 504	1525
Total	2264	995	3259

Chi Square = 193.9
P<.001

The above problems not withstanding, an inspection of Table 2A provides a description of the relative frequency with which objectives were chosen, the rate of achievement of objectives, and how the rate of achievement varies as a function of class type. Section 1 of Table 2A shows that the objective "Prepare for a better job" was the most frequently chosen (46.1 %). However, the achievement rate for this objective (23.7%) was lower that the achievement rates for "prepare for a job" (59.6%), "update current job skills" (78.6%), "fulfill certif. req." (96.6%), "increase reading and writing skills" (86.8%), "college preparation" (24.7%), and "self enrichment/improvement" (66.7%).

Sections 2, 3, and 4 of Table 2A represent results separately for the ESL, BED, and Union specific classes. As expected, for the ESL classes, the objective "Learn English" is chosen most frequently (60.2%). However, this objective is reported as being achieved by only 16.7% of the students specifying this objective. For the BED classes, the two objectives "GED preparation" and "Prepare for a better job" were chosen by approximately 67% of the students. Whereas the achievement rate was high for the latter objective (63.8%), it was much lower for the former objective (13.3%). An inspection of section 4 of Table 2A, shows that for students enrolled in Union specific courses, the objective "Prepare for a better job" was chosen by 70.8% of the cases. The achievement rate, however, is relatively low (22.5%)

The cross tabulation table found in section 5 of Table 2A enables one to ascertain the relationship between class type and achievement of objectives. This table is formed by classifying each of N = 3259 students in terms of which type of class they were enrolled in, and whether or not they achieved their stated objective (regardless of which objective was chosen). The statistical significance of the relationship is tested using a chi square test with 2 degrees of freedom. The resulting chi square value of 226.2 is highly significant, implying a statistical relationship between class type and the achievement of objectives. This result can be best understood by comparing the odds of achieving an objective for each of the three class types. In Section 5 of Table 2A it is seen that for the ESL classes, N = 152 achieved their stated objective, while N = 841 did not. Thus the odds of achieving the stated objective for students in ESL classes is odds(ESL) = 152/841 = .18. The corresponding odds for the BED and Union specific classes are odds(BED) = 339/402= .84, and odds(Union) = 504/1021 = .49. The fact that the three odds ratios are quite different is the basis for the significant chi square statistic. It is seen that the odds of achieving one's stated objective is greatest for students in BED classes, followed by students in Union specific classes, with the odds being smallest for students in ESL classes. It should also be noted that overall, an objective was achieved for only 995 of the 3259 students analyzed, the overall achievement rate being 995/3259 = .31. However, as previously discussed, this proportion would rise to .47 if the N = 543 students who achieved an objective different from their initially stated

objective were considered as positive outcomes. An inspection of the coding sheets used in recording the objective and outcome data showed that the primary reason for failing to achieve the stated objective was the student dropping out of the course.

Tables 2B - 2P present the results for the achievement of objectives separately for each of the Unions. It should be noted that since every program did not offer all three types of classes, certain sections of the tables are in effect blank. In particular, Section 5 (the cross tabulation of class type with achievement of objectives) is only presented for those unions offering more than one class type.

TABLE 2B
Student Performance In Terms of Achievement of Objectives
(ACTWU)

1. All Classes (N=261) (Nclasses=14)

Objective	% Stating Objective	% Stating Objective who Achieve Objective
A-Ged Preparation	26.8	7.1
B-ESL/Citizenship	2.3	0.0
C-ESL/Legalization	0.0	-
D-Learn English	30.7	1.3
E-Prepare for a Job	0.0	-
F-Prepare Better Job	.8	0.0
G-Update Current Job Skills	0.0	-
H-Fulfill Certif. Req.	0.0	-
I-Increase Read/Writ Skills	39.5	94.2
J-College Preparation	0.0	-
K-Self Enrichment/Improve.	0.0	-
--No Objective Stated	0.0	

2. ESL Classes (N=59) (Nclasses=4)

Objective	% Stating Objective	% Stating Objective who Achieve Objective
A-Ged Preparation	1.7	0.0
B-ESL/Citizenship	10.2	0.0
C-ESL/Legalization	0.0	-
D-Learn English	84.7	2.0
E-Prepare for a Job	0.0	-
F-Prepare Better Job	3.4	0.0
G-Update Current Job Skills	0.0	-
H-Fulfill Certif. Req.	0.0	-
I-Increase Read/Writ Skills	0.0	-
J-College Preparation	0.0	-
K-Self Enrichment/Improve.	0.0	-
--No Objective Stated	0.0	

3. Basic Education Classes (N=156) (Nclasses=10)

Objective	% Stating Objective	% Stating Objective who Achieve Objective
A-Ged Preparation	44.2	7.2
B-ESL/Citizenship	0.0	-
C-ESL/Legalization	0.0	-
D-Learn English	.6	0.0
E-Prepare for a Job	0.0	-
F-Prepare Better Job	0.0	-
G-Update Current Job Skills	0.0	-
H-Fulfill Certif. Req.	0.0	-
I-Increase Read/Writ Skills	55.1	93.1
J-College Preparation	0.0	-
K-Self Enrichment/Improve.	0.0	-
--No Objective Stated	0.0	

4. Union Specific Classes

Objective	% Stating Objective	% Stating Objective who Achieve Objective
	NOT APPLICABLE	

5. The Overall Relationship of Type of Class and Achievement of Objective

Class Type	Objective Not Achieved	Objective Achieved	Total
ESL	N= 58	N= 1	59
Basic Educ.	N= 71	N= 85	156
Union Specific	N= 0	N= 0	-
Total	129	86	215

Chi Square = 47.5
P<.001

TABLE 2C
Student Performance In Terms of Achievement of Objectives
(Computer Classes)

1. All Classes

Objective	% Stating Objective	% Stating Objective who Achieve Objective

NOT APPLICABLE

2. ESL Classes

Objective	% Stating Objective	% Stating Objective who Achieve Objective

NOT APPLICABLE

3. Basic Education Classes

Objective	% Stating Objective	% Stating Objective who Achieve Objective

NOT APPLICABLE

4. Union Specific Classes (N=207) (Nclasses=21)

Objective	% Stating Objective	% Stating Objective who Achieve Objective
A-Ged Preparation	0.0	-
B-ESL/Citizenship	0.0	-
C-ESL/Legalization	0.0	-
D-Learn English	0.0	-
E-Prepare for a Job	.5	100.0
F-Prepare Better Job	95.7	44.4
G-Update Current Job Skills	3.4	57.1
H-Fulfill Certif. Req.	0.0	-
I-Increase Read/Writ Skills	0.0	-
J-College Preparation	0.0	-
K-Self Enrichment/Improve.	.5	100.0
--No Objective Stated	0.0	

5. The Overall Relationship of Type of Class and Achievement of Objective

Class Type	Objective Not Achieved	Objective Not Achieved	Total

NOT APPLICABLE

TABLE 2D
Student Performance In Terms of Achievement of Objectives
(District 65/UAW)

1. All Classes (N=371) (Nclasses=18)

Objective	% Stating Objective	% Stating Objective who Achieve Objective
A-Ged Preparation	16.4	0.0
B-ESL/Citizenship	.3	0.0
C-ESL/Legalization	1.9	28.6
D-Learn English	62.5	10.3
E-Prepare for a Job	7.8	37.9
F-Prepare Better Job	3.8	14.3
G-Update Current Job Skills	1.1	25.0
H-Fulfill Certif. Req.	.3	0.0
I-Increase Read/Writ Skills	1.3	0.0
J-College Preparation	3.5	23.1
K-Self Enrichment/Improve.	1.1	50.0
--No Objective Stated	0.0	

2. ESL Classes (N=277) (Nclasses=13)

Objective	% Stating Objective	% Stating Objective who Achieve Objective
A-Ged Preparation	0.0	-
B-ESL/Citizenship	.4	-
C-ESL/Legalization	2.5	28.6
D-Learn English	81.6	9.7
E-Prepare for a Job	9.7	40.7
F-Prepare Better Job	2.9	25.0
G-Update Current Job Skills	.4	0.0
H-Fulfill Certif. Req.	.4	0.0
I-Increase Read/Writ Skills	.4	0.0
J-College Preparation	1.1	0.0
K-Self Enrichment/Improve.	.7	0.0
--No Objective Stated	0.0	

3. Basic Education Classes (N=80) (Nclasses=4)

Objective	% Stating Objective	% Stating Objective who Achieve Objective
A-Ged Preparation	73.8	0.0
B-ESL/Citizenship	0.0	-
C-ESL/Legalization	0.0	-
D-Learn English	3.8	66.7
E-Prepare for a Job	1.3	0.0
F-Prepare Better Job	1.3	0.0
G-Update Current Job Skills	2.5	0.0
H-Fulfill Certif. Req.	0.0	0.0
I-Increase Read/Writ Skills	2.5	0.0
J-College Preparation	12.5	30.0
K-Self Enrichment/Improve.	2.5	0.0
--No Objective Stated	0.0	

4. Union Specific Classes (N=14) (Nclasses=1)

Objective	% Stating Objective	% Stating Objective who Achieve Objective
A-Ged Preparation	14.3	0.0
B-ESL/Citizenship	0.0	-
C-ESL/Legalization	0.0	-
D-Learn English	21.4	0.0
E-Prepare for a Job	7.1	0.0
F-Prepare Better Job	35.7	0.0
G-Update Current Job Skills	7.1	0.0
H-Fulfill Certif. Req.	0.0	-
I-Increase Read/Writ Skills	14.3	0.0
J-College Preparation	0.0	-
K-Self Enrichment/Improve.	0.0	-
--No Objective Stated	0.0	

5. The Overall Relationship of Type of Class and Achievement of Objective

Class Type	Objective Not Achieved	Objective Achieved	Total
ESL	N= 240	N= 37	277
Basic Educ.	N= 72	N= 8	80
Union Specific	N= 14	N= 0	14
Total	326	45	371

Chi Square = 2.7
NS

TABLE 2E
Student Performance In Terms of Achievement of Objectives
(District Council 1707)

1. All Classes (N=309) (Nclasses=16)

Objective	% Stating Objective	% Stating Objective who Achieve Objective
A-Ged Preparation	0.0	-
B-ESL/Citizenship	0.0	-
C-ESL/Legalization	0.0	-
D-Learn English	.6	100.0
E-Prepare for a Job	6.1	100.0
F-Prepare Better Job	25.2	84.6
G-Update Current Job Skills	40.5	97.6
H-Fulfill Certif. Req.	27.5	97.6
I-Increase Read/Writ Skills	0.0	-
J-College Preparation	0.0	-
K-Self Enrichment/Improve.	0.0	-
--No Objective Stated	0.0	

2. ESL Classes (N=277) (Nclasses=13)

Objective	% Stating Objective	% Stating Objective who Achieve Objective

NOT APPLICABLE

3. Basic Education Classes (N=55) (Nclasses=2)

Objective	% Stating Objective	% Stating Objective who Achieve Objective
A-Ged Preparation	0.0	-
B-ESL/Citizenship	0.0	-
C-ESL/Legalization	0.0	-
D-Learn English	0.0	-
E-Prepare for a Job	0.0	-
F-Prepare Better Job	100.0	78.2
G-Update Current Job Skills	0.0	-
H-Fulfill Certif. Req.	0.0	-
I-Increase Read/Writ Skills	0.0	-
J-College Preparation	0.0	-
K-Self Enrichment/Improve.	0.0	-
--No Objective Stated	0.0	

4. Union Specific Classes (N=254) (Nclasses=14)

Objective	% Stating Objective	% Stating Objective who Achieve Objective
A-Ged Preparation	0.0	-
B-ESL/Citizenship	0.0	-
C-ESL/Legalization	0.0	-
D-Learn English	.8	100.0
E-Prepare for a Job	7.5	100.0
F-Prepare Better Job	9.1	100.0
G-Update Current Job Skills	49.2	97.6
H-Fulfill Certif. Req.	33.5	97.6
I-Increase Read/Writ Skills	0.0	-
J-College Preparation	0.0	-
K-Self Enrichment/Improve.	0.0	-
--No Objective Stated	0.0	

5. The Overall Relationship of Type of Class and Achievement of Objective

Class Type	Objective Not Achieved	Objective Achieved	Total
ESL	N= 0	N= 0	0
Basic Educ.	N= 12	N= 43	55
Union Specific	N= 5	N= 249	254
Total	17	292	309

Chi Square = 30.6
P< .001

TABLE 2F
Student Performance In Terms of Achievement of Objectives
(Hotel Trades Council)

1. All Classes

Objective	% Stating Objective	% Stating Objective who Achieve Objective

NOT APPLICABLE

2. ESL Classes (N=277) (Nclasses=13)

Objective	% Stating Objective	% Stating Objective who Achieve Objective

NOT APPLICABLE

3. Basic Education Classes (N=115) (Nclasses=16)

Objective	% Stating Objective	% Stating Objective who Achieve Objective
A-Ged Preparation	0.0	-
B-ESL/Citizenship	0.0	-
C-ESL/Legalization	0.0	-
D-Learn English	0.0	-
E-Prepare for a Job	0.0	-
F-Prepare Better Job	99.1	.68
G-Update Current Job Skills	.9	-
H-Fulfill Certif. Req.	0.0	-
I-Increase Read/Writ Skills	0.0	-
J-College Preparation	0.0	-
K-Self Enrichment/Improve.	0.0	-
--No Objective Stated	0.0	

4. Union Specific Classes

Objective	% Stating Objective	% Stating Objective who Achieve Objective

NOT APPLICABLE

5. The Overall Relationship of Type of Class and Achievement of Objective

Class Type	Objective Not Achieved	Objective Not Achieved	Total

NOT APPLICABLE

TABLE 2G
Student Performance In Terms of Achievement of Objectives
(IBT Joint Council 16 Local 237)

1. All Classes

Objective	% Stating Objective	% Stating Objective who Achieve Objective

NOT APPLICABLE

2. ESL Classes

Objective	% Stating Objective	% Stating Objective who Achieve Objective

NOT APPLICABLE

3. Basic Education Classes

Objective	% Stating Objective	% Stating Objective who Achieve Objective

NOT APPLICABLE

4. Union Specific Classes (N=849) (Nclasses=57)

Objective	% Stating Objective	% Stating Objective who Achieve Objective
A-Ged Preparation	0.0	-
B-ESL/Citizenship	0.0	-
C-ESL/Legalization	0.0	-
D-Learn English	0.0	-
E-Prepare for a Job	0.0	-
F-Prepare Better Job	90.9	13.0
G-Update Current Job Skills	.9	-
H-Fulfill Certif. Req.	0.0	-
I-Increase Read/Writ Skills	0.0	-
J-College Preparation	.2	0.0
K-Self Enrichment/Improve.	0.0	-
--No Objective Stated	8.8	

5. The Overall Relationship of Type of Class and Achievement of Objective

Class Type	Objective Not Achieved	Objective Not Achieved	Total

NOT APPLICABLE

TABLE 2H
Student Performance In Terms of Achievement of Objectives
(ILA Local 1814)

1. All Classes (N=70) (Nclasses=4)

Objective	% Stating Objective	% Stating Objective who Achieve Objective
A-Ged Preparation	20.0	7.1
B-ESL/Citizenship	8.6	100.0
C-ESL/Legalization	0.0	-
D-Learn English	11.4	100.0
E-Prepare for a Job	0.0	-
F-Prepare Better Job	10.0	28.6
G-Update Current Job Skills	1.4	100.0
H-Fulfill Certif. Req.	0.0	-
I-Increase Read/Writ Skills	25.7	66.7
J-College Preparation	1.4	100.0
K-Self Enrichment/Improve.	21.4	60.0
--No Objective Stated	-	

2. ESL Classes (N=31) (Nclasses=2)

Objective	% Stating Objective	% Stating Objective who Achieve Objective
A-Ged Preparation	0.0	-
B-ESL/Citizenship	19.4	100.0
C-ESL/Legalization	0.0	-
D-Learn English	25.8	100.0
E-Prepare for a Job	0.0	-
F-Prepare Better Job	12.9	25.0
G-Update Current Job Skills	0.0	-
H-Fulfill Certif. Req.	0.0	-
I-Increase Read/Writ Skills	25.8	75.0
J-College Preparation	3.2	100.0
K-Self Enrichment/Improve.	12.9	100.0
--No Objective Stated	0.0	

3. Basic Education Classes (N=39) (Nclasses=2)

Objective	% Stating Objective	% Stating Objective who Achieve Objective
A-Ged Preparation	35.9	7.1
B-ESL/Citizenship	0.0	-
C-ESL/Legalization	0.0	-
D-Learn English	0.0	-
E-Prepare for a Job	0.0	-
F-Prepare Better Job	7.7	33.3
G-Update Current Job Skills	2.6	0.0
H-Fulfill Certif. Req.	0.0	-
I-Increase Read/Writ Skills	25.6	60.0
J-College Preparation	0.0	-
K-Self Enrichment/Improve.	28.2	45.5
--No Objective Stated	-	

4. Union Specific Classes

Objective	% Stating Objective	% Stating Objective who Achieve Objective

NOT APPLICABLE

5. The Overall Relationship of Type of Class and Achievement of Objective

Class Type	Objective Not Achieved	Objective Not Achieved	Total
ESL	N= 5	N= 26	31
Basic Educ.	N= 26	N= 13	39
Union Specific	N= 0	N= 0	-
Total	31	39	70

Chi Square = 15.9
P< .001

TABLE 21
Student Performance In Terms of Achievement of Objectives
(ILGWU)

1. All Classes (N=738) (Nclasses=53)

Objective	% Stating Objective	% Stating Objective who Achieve Objective
A-Ged Preparation	.4	33.3
B-ESL/Citizenship	40.8	5.3
C-ESL/Legalization	.4	0.0
D-Learn English	48.9	19.4
E-Prepare for a Job	.8	50.0
F-Prepare Better Job	5.4	35.0
G-Update Current Job Skills	2.2	6.3
H-Fulfill Certif. Req.	0.0	-
I-Increase Read/Writ Skills	.1	100.0
J-College Preparation	0.0	-
K-Self Enrichment/Improve.	.3	100.0
--No Objective Stated	.7	

2. ESL Classes (N=590) (Nclasses=37)

Objective	% Stating Objective	% Stating Objective who Achieve Objective
A-Ged Preparation	.5	33.3
B-ESL/Citizenship	50.5	5.4
C-ESL/Legalization	.2	0.0
D-Learn English	47.1	16.5
E-Prepare for a Job	.3	0.0
F-Prepare Better Job	.2	0.0
G-Update Current Job Skills	0.0	-
H-Fulfill Certif. Req.	0.0	-
I-Increase Read/Writ Skills	.2	100.0
J-College Preparation	0.0	-
K-Self Enrichment/Improve.	.2	100.0
--No Objective Stated	.8	

3. Basic Education Classes

Objective	% Stating Objective	% Stating Objective who Achieve Objective

NOT APPLICABLE

4. Union Specific Classes (N=148) (Nclasses=13)

Objective	% Stating Objective	% Stating Objective who Achieve Objective
A-Ged Preparation	0.0	-
B-ESL/Citizenship	2.0	0.0
C-ESL/Legalization	1.4	0.0
D-Learn English	56.1	28.9
E-Prepare for a Job	2.7	75.0
F-Prepare Better Job	26.4	35.9
G-Update Current Job Skills	10.8	6.3
H-Fulfill Certif. Req.	0.0	-
I-Increase Read/Writ Skills	0.0	-
J-College Preparation	0.0	100.0
K-Self Enrichment/Improve.	.7	-
--No Objective Stated	0.0	

5. The Overall Relationship of Type of Class and Achievement of Objective

Class Type	Objective Not Achieved	Objective Achieved	Total
ESL	N= 525	N= 65	590
Basic Educ.	N= 0	N= 0	
Union Specific	N= 105	N= 43	148
Total	630	108	738

Chi Square = 29.4
P< .001

TABLE 2J
Student Performance In Terms of Achievement of Objectives
(IUOE Local 30)

1. All Classes

Objective	% Stating Objective	% Stating Objective who Achieve Objective

NOT APPLICABLE

2. ESL Classes

Objective	% Stating Objective	% Stating Objective who Achieve Objective

NOT APPLICABLE

3. Basic Education Classes

Objective	% Stating Objective	% Stating Objective who Achieve Objective

NOT APPLICABLE

4. Union Specific Classes (N=44) (Nclasses=1)

Objective	% Stating Objective	% Stating Objective who Achieve Objective
A-Ged Preparation	0.0	-
B-ESL/Citizenship	0.0	-
C-ESL/Legalization	0.0	-
D-Learn English	0.0	-
E-Prepare for a Job	0.0	-
F-Prepare Better Job	100.0	70.5
G-Update Current Job Skills	0.0	-
H-Fulfill Certif. Req.	0.0	-
I-Increase Read/Writ Skills	0.0	-
J-College Preparation	0.0	-
K-Self Enrichment/Improve.	0.0	-
--No Objective Stated	0.0	

5. The Overall Relationship of Type of Class and Achievement of Objective

Class Type	Objective Not Achieved	Objective Not Achieved	Total

NOT APPLICABLE

TABLE 2K
Student Performance In Terms of Achievement of Objectives
(Joint Apprentice Training)

1. All Classes

Objective	% Stating Objective	% Stating Objective who Achieve Objective

NOT APPLICABLE

2. ESL Classes

Objective	% Stating Objective	% Stating Objective who Achieve Objective

NOT APPLICABLE

3. Basic Education Classes (N=49) (Nclasses=5)

Objective	% Stating Objective	% Stating Objective who Achieve Objective
A-Ged Preparation	0.0	-
B-ESL/Citizenship	0.0	-
C-ESL/Legalization	0.0	-
D-Learn English	2.0	0.0
E-Prepare for a Job	0.0	-
F-Prepare Better Job	0.0	-
G-Update Current Job Skills	65.3	100.0
H-Fulfill Certif. Req.	2.0	100.0
I-Increase Read/Writ Skills	2.0	100.0
J-College Preparation	0.0	-
K-Self Enrichment/Improve.	24.5	100.0
--No Objective Stated	4.1	

4. Union Specific Classes

Objective	% Stating Objective	% Stating Objective who Achieve Objective

NOT APPLICABLE

5. The Overall Relationship of Type of Class and Achievement of Objective

Class Type	Objective Not Achieved	Objective Not Achieved	Total

NOT APPLICABLE

TABLE 2L
Student Performance In Terms of Achievement of Objectives
(Local 144)

1. All Classes (N=217) (Nclasses=9)

Objective	% Stating Objective	% Stating Objective who Achieve Objective
A-Ged Preparation	60.4	22.1
B-ESL/Citizenship	0.0	-
C-ESL/Legalization	0.0	-
D-Learn English	8.8	52.6
E-Prepare for a Job	.5	0.0
F-Prepare Better Job	2.8	33.3
G-Update Current Job Skills	0.0	0.0
H-Fulfill Certif. Req.	0.0	0.0
I-Increase Read/Writ Skills	.5	100.0
J-College Preparation	25.3	25.5
K-Self Enrichment/Improve.	1.8	50.0
--No Objective Stated	0.0	

2. ESL Classes (N=18) (Nclasses=1)

Objective	% Stating Objective	% Stating Objective who Achieve Objective
A-Ged Preparation	0.0	-
B-ESL/Citizenship	0.0	-
C-ESL/Legalization	0.0	-
D-Learn English	94.4	47.1
E-Prepare for a Job	0.0	-
F-Prepare Better Job	0.0	-
G-Update Current Job Skills	0.0	-
H-Fulfill Certif. Req.	0.0	-
I-Increase Read/Writ Skills	0.0	-
J-College Preparation	5.6	0.0
K-Self Enrichment/Improve.	0.0	-
--No Objective Stated	0.0	

3. Basic Education Classes (N=199) (Nclasses=8)

Objective	% Stating Objective	% Stating Objective who Achieve Objective
A-Ged Preparation	65.8	22.1
B-ESL/Citizenship	0.0	-
C-ESL/Legalization	0.0	-
D-Learn English	1.0	100.0
E-Prepare for a Job	.5	0.0
F-Prepare Better Job	3.0	33.3
G-Update Current Job Skills	0.0	-
H-Fulfill Certif. Req.	0.0	-
I-Increase Read/Writ Skills	.5	100.0
J-College Preparation	27.1	25.9
K-Self Enrichment/Improve.	2.0	50.0
--No Objective Stated	0.0	

4. Union Specific Classes

Objective	% Stating Objective	% Stating Objective who Achieve Objective

NOT APPLICABLE

5. The Overall Relationship of Type of Class and Achievement of Objective

Class Type	Objective Not Achieved	Objective Achieved	Total
ESL	N= 10	N= 8	18
Basic Educ.	N= 149	N= 50	199
Union Specific	N= 0	N= 0	-
Total	159	58	217

Chi Square = 2.3
NS

TABLE 2M
Student Performance In Terms of Achievement of Objectives
(Local 1199)

1. All Classes

Objective	% Stating Objective	% Stating Objective who Achieve Objective

NOT APPLICABLE

2. ESL Classes (N=19) (Nclasses=1)

Objective	% Stating Objective	% Stating Objective who Achieve Objective
A-Ged Preparation	-	-
B-ESL/Citizenship	-	-
C-ESL/Legalization	-	-
D-Learn English	100.0	78.9
E-Prepare for a Job	-	-
F-Prepare Better Job	-	-
G-Update Current Job Skills	-	-
H-Fulfill Certif. Req.	-	-
I-Increase Read/Writ Skills	-	-
J-College Preparation	-	-
K-Self Enrichment/Improve.	-	-
--No Objective Stated	-	

3. Basic Education Classes

Objective	% Stating Objective	% Stating Objective who Achieve Objective

NOT APPLICABLE

4. Union Specific Classes

Objective	% Stating Objective	% Stating Objective who Achieve Objective

NOT APPLICABLE

5. The Overall Relationship of Type of Class and Achievement of Objective

Class Type	Objective Not Achieved	Objective Not Achieved	Total

NOT APPLICABLE

TABLE 2N
Student Performance In Terms of Achievement of Objectives
(SKY CHEF)

1. All Classes

Objective	% Stating Objective	% Stating Objective who Achieve Objective

NOT APPLICABLE

2. ESL Classes

Objective	% Stating Objective	% Stating Objective who Achieve Objective

NOT APPLICABLE

3. Basic Education Classes

Objective	% Stating Objective	% Stating Objective who Achieve Objective

NOT APPLICABLE

4. Union Specific Classes (N=27) (Nclasses=1)

Objective	% Stating Objective	% Stating Objective who Achieve Objective
A-Ged Preparation	0.0	-
B-ESL/Citizenship	0.0	-
C-ESL/Legalization	0.0	-
D-Learn English	18.5	0.0
E-Prepare for a Job	3.7	0.0
F-Prepare Better Job	66.7	0.0
G-Update Current Job Skills	0.0	-
H-Fulfill Certif. Req.	0.0	-
I-Increase Read/Writ Skills	0.0	-
J-College Preparation	3.7	0.0
K-Self Enrichment/Improve.	7.4	0.0
--No Objective Stated	0.0	

5. The Overall Relationship of Type of Class and Achievement of Objective

Class Type	Objective Not Achieved	Objective Not Achieved	Total

NOT APPLICABLE

TABLE 20
Student Performance In Terms of Achievement of Objectives
(Local 365)

1. All Classes (N=36) (Nclasses=2)

Objective	% Stating Objective	% Stating Objective who Achieve Objective
A-Ged Preparation	22.2	50.0
B-ESL/Citizenship	0.0	-
C-ESL/Legalization	0.0	-
D-Learn English	0.0	-
E-Prepare for a Job	0.0	-
F-Prepare Better Job	77.8	3.7
G-Update Current Job Skills	0.0	-
H-Fulfill Certif. Req.	0.0	-
I-Increase Read/Writ Skills	0.0	-
J-College Preparation	0.0	-
K-Self Enrichment/Improve.	0.0	-
--No Objective Stated	0.0	

2. ESL Classes (N=27) (Nclasses=4)

Objective	% Stating Objective	% Stating Objective who Achieve Objective
A-Ged Preparation	0.0	-
B-ESL/Citizenship	0.0	-
C-ESL/Legalization	0.0	-
D-Learn English	0.0	-
E-Prepare for a Job	0.0	-
F-Prepare Better Job	100.0	0.0
G-Update Current Job Skills	0.0	-
H-Fulfill Certif. Req.	0.0	-
I-Increase Read/Writ Skills	0.0	-
J-College Preparation	0.0	-
K-Self Enrichment/Improve.	0.0	-
--No Objective Stated	0.0	

3. Basic Education Classes (N=9) (Nclasses=1)

Objective	% Stating Objective	% Stating Objective who Achieve Objective
A-Ged Preparation	88.9	50.0
B-ESL/Citizenship	0.0	-
C-ESL/Legalization	0.0	-
D-Learn English	0.0	0.0
E-Prepare for a Job	0.0	-
F-Prepare Better Job	11.1	100.0
G-Update Current Job Skills	0.0	-
H-Fulfill Certif. Req.	0.0	-
I-Increase Read/Writ Skills	0.0	-
J-College Preparation	0.0	-
K-Self Enrichment/Improve.	0.0	-
--No Objective Stated	0.0	

4. Union Specific Classes

Objective	% Stating Objective	% Stating Objective who Achieve Objective

NOT APPLICABLE

5. The Overall Relationship of Type of Class and Achievement of Objective

Class Type	Objective Not Achieved	Objective Achieved	Total
ESL	N= 27	N= 0	27
Basic Educ.	N= 4	N= 5	9
Union Specific	N= 0	N= 0	-
Total	31	5	36

Chi Square = 13.1
$p < .001$

TABLE 2P
Student Performance In Terms of Achievement of Objectives
(UFCW Local 342-50)

1. All Classes

Objective	% Stating Objective	% Stating Objective who Achieve Objective

NOT APPLICABLE

2. ESL Classes

Objective	% Stating Objective	% Stating Objective who Achieve Objective

NOT APPLICABLE

3. Basic Education Classes (N=45) (Nclasses=3)

Objective	% Stating Objective	% Stating Objective who Achieve Objective
A-Ged Preparation	-	-
B-ESL/Citizenship	-	-
C-ESL/Legalization	-	-
D-Learn English	-	-
E-Prepare for a Job	-	-
F-Prepare Better Job	100.0	.44
G-Update Current Job Skills	-	-
H-Fulfill Certif. Req.	-	-
I-Increase Read/Writ Skills	-	-
J-College Preparation	-	-
K-Self Enrichment/Improve.	-	-
--No Objective Stated	-	

4. Union Specific Classes

Objective	% Stating Objective	% Stating Objective who Achieve Objective

NOT APPLICABLE

5. The Overall Relationship of Type of Class and Achievement of Objective

Class Type	Objective Not Achieved	Objective Not Achieved	Total

NOT APPLICABLE

One useful summarization of the results in Tables 2A to 2P is provided by the proportion of students in each Union program achieving the stated objective (regardless of which objective). These proportions can be simply computed from either the results given in section 5 of Tables 2A-2P (where available) or from the proportions presented in sections 1-4. These summary results are given in Table 2Q.

TABLE 2Q
A Summarization of the Proportion of Students Achieving the Stated Objective Within Each Program

Union	N	Proportion Achieving Stated Objective
ACTWU	215	.40
Computer Classes	207	.45
District 65/UAW	371	.12
District Council 1707	309	.95
Hotel Trades Council	115	.68
IBT Jt. Coun. Local 237	849	.12
ILA Local 1814	70	.56
ILGWU	738	.15
IUOE Local 30	44	.71
Joint Appren. Tr.	49	.82
Local 144	217	.27
Local 1199	19	.79
Sky Chef	27	.00
UAW Local 365	36	.14
UFCW Lcoal 342-50	45	.44
Total	3259	.31

It is seen in Table 2Q that there is wide variability in the proportion of students achieving their stated objectives. Achievement rates exceeding 80 percent are found for the District Council 1707 and Joint Apprentice Training programs. Achievement rates at or below 15 percent are found for the following programs: District 65/UAW, IBT Jt. Coun. Local 237, ILGWU, Sky Chef, and UAW Local 365.

We now consider the specific results in Tables 2B-2P for each of the Union programs . An inspection of Section 2 (ESL classes) in Tables 2B - 2P for the union programs offering ESL classes (ACTWU, Table 2B; District 65/UAW, Table 2D; ILA Local 1814, Table 2H; ILGWU, Table 2I; Local 144, Table 2L; Local 1199, Table 2M; UAW Local 365, Table 2O) shows that the most frequently chosen objectives for students enrolled in these classes are as follows: "Learn English", "Increase Reading and Writing Skills", "ESL/Citizenship", and "Prepare for a better job".

An inspection of Section 3 (BED classes) for the union programs offering BED classes (ACTWU, Table 2B; District 65/UAW, Table 2D; District Council 1707, Table 2E; Hotel Trades Council Table 2F; ILA Local 1810, Table 2H; Joint Apprentice Training Table 2H; Local 144, Table 2L; UAW Local 365, Table 2O; UFCW Local 342-50, Table 2P) shows that the most frequently chosen objectives for students enrolled in these classes are as follows: "Increase Reading/Writing Skills", "GED Preparation", "Prepare for a Better Job", and "Update Current Job Skills".

The most frequently occurring objectives for students enrolled in Union specific classes (Computer Classes, Table 2C; District 65/UAW, Table 2D; District Council 1707, Table 2F; IBT Jt. Coun. Local 237, Table 2G; ILGWU, Table 2I; IUOE Local 30, Table 2J; Sky Chef, Table 2N) can be seen by considering Section 4 of the appropriate tables. These most frequently occurring objectives are as follows: "Prepare for a Better Job", "Update Current Job Skills", and "Learn English".

An investigation of how the rate of achievement of objectives varies as a function of class type within each union program must be limited to those programs offering more than a single class type. We now consider these programs. Table 2R summarizes the relationship of class type to achievement of objectives within each of the relevant unions. The information displayed in Table 2R was compiled from the Section 5 results in Tables 2B to 2P.

TABLE 2R
The Relationship of Class Type to Achievement of Objectives for Individual Union Programs

Union	Odds of Achieving Objective				
	ESL	BED	Union Specific	Significance	
ACTWU	.02	1.20	-	p	.001
District 65/UAW	.15	.11	0.00	NS*	
District Coun. 1707	-	3.60	49.80	p	.001
ILA Local 1814	5.20	.50	-	p	.001
ILGWU	.12	-	.41	p	.001
Local 144	.80	.33	-	NS*	
UAW Local 365	0.00	1.25	-	p	.001

*NS (not significant at p=.05)

The results in Table 2R show that there is a statistically significant relationship between class type and the achievement of objectives for the following Union programs: ACTWU, District Council 1707, ILA Local 1814, ILGWU, and UAW Local 365. For the three programs offering both ESL and BED classes it is seen that the form of the relationship varies as a function of the program. For the ACTWU and UAW Local 365 programs, the odds of achieving the stated objective are higher for students in the BED classes as compared to the ESL classes. However, the reverse is true for the ILA Local 1814 program. In the District Council 1707 program, the odds of achieving the stated objective are nearly 15 times greater for students in the Union specific classes rather than for those enrolled in the BED classes. In the ILGWU program, the odds of achievement were greater for the Union specific classes as opposed to the ESL classes.

Summarization of results for the achievement of objectives

For the entire student group, it was found that the overall achievement rate for class objectives was rather low (.31). However, this result may be an underestimate due to the manner in which the data were recorded. For example, if the N = 543 students achieving objectives different from their stated objective were treated as positive outcomes, the overall achievement rate would rise to a value of .47. It should also be noted that the achievement rate showed a considerable degree of variability across the 15 Union programs. Table 2Q shows that the rates range from 0.00 to .95. An investigation of the relationship of class type to the achievement of objectives showed a highly significant relationship for the entire group of students. The odds of achieving the stated objectives were .18, .84, and .49 for the ESL, BED, and Union specific classes respectively. Thus, overall, students enrolled in BED classes had the greatest odds of achieving their stated objectives. Significant relationships between class type and the achievement of objectives was also found within five of the Union programs. The form of this relationship was different across the programs. These results are summarized in Table 2R.

4. A Comparison of ESL, BED, and Union Specific Classes in terms of Average Contact Hours

The question of how average contact hours vary as a function of class type (ESL, BED, Union specific) was investigated using analysis of variance techniques. For all students combined, the average contact hours for each type of class were statistically compared. The same analysis was repeated within each union program for those unions offering more than one class type. The results of these analyses are presented in Tables 3A to 3P. In performing these analyses a relatively large amount of missing data was encountered. Of the N = 3775 students, contact hours were not recorded for N = 1357, slightly more than one third of the cases. For these individuals, the appropriate data columns in the Impact file were simply blank, or the recorded entry date for the student was not in the 1989-1990 time period. An additional 108 cases for whom contact hours were available could not be used since class type was unknown. Thus, a total sample of N = 2310 cases was available for investigating the question of how average contact hours vary as a function of class type.

TABLE 3A
Performance In Terms of Contact Hours As Function of Type of Class
(All Students)

Type of Class	Mean Contact Hrs.	Standard Deviation	N
ESL	62.3	45.0	679
Basic Education	70.3	46.3	603
Union Specific	33.1	28.4	1028
All Classes	54.1	42.3	2310

$F(2,2307) = 211.8, P<.001$

TABLE 3B
Performance In Terms of Contact Hours As Function of Type of Class (ACTWU)

Type of Class	Mean Contact Hrs.	Standard Deviation	N
ESL	103.2	48.4	59
Basic Education	94.6	49.1	156
Union Specific	-	-	-
All Classes	96.9	49.0	215

$F(1,213) = 1.3$, NS

TABLE 3C
Performance In Terms of Contact Hours As Function of Type of Class (Computer Classes)

Type of Class	Mean Contact Hrs.	Standard Deviation	N
ESL	-	-	-
Basic Education	-	-	-
Union Specific	41.7	11.7	207
All Classes	-	-	-

TABLE 3D
Performance In Terms of Contact Hours As Function of Type of Class
(District 65/UAW)

Type of Class	Mean Contact Hrs.	Standard Deviation	N
ESL	79.6	53.5	18
Basic Education	46.0	10.7	8
Union Specific	-	-	-
All Classes	69.3	47.2	26

$F(1,24) = 3.0$ NS

TABLE 3E
Performance In Terms of Contact Hours As Function of Type of Class
(District Council 1707)

Type of Class	Mean Contact Hrs.	Standard Deviation	N
ESL	-	-	0
Basic Education	86.2	60.4	55
Union Specific	49.4	28.6	218
All Classes	56.8	39.9	273

$F(1,271) = 43.1$, $P < .001$

TABLE 3F
Performance In Terms of Contact Hours As Function of Type of Class
(Hotel Trades Council)

Type of Class	Mean Contact Hrs.	Standard Deviation	N
ESL	-	-	-
Basic Education	48.1	25.2	114
Union Specific	-	-	-
All Classes	-	-	-

TABLE 3G
Performance In Terms of Contact Hours As Function of Type of Class
(IBT Joint Council 16 Local 237)

Type of Class	Mean Contact Hrs.	Standard Deviation	N
ESL	-	-	-
Basic Education	-	-	-
Union Specific	20.9	12.[illegible]	454
All Classes	-	-	-

TABLE 3H
Performance In Terms of Contact Hours As Function of Type of Class
(ILA Local 1814)

Type of Class	Mean Contact Hrs.	Standard Deviation	N
ESL	105.3	38.8	28
Basic Education	122.6	41.6	29
Union Specific	-	-	-
All Classes	114.1	40.8	57

F (1,55) = 2.6, NS

TABLE 31
Performance In Terms of Contact Hours As Function of Type of Class (ILGWU)

Type of Class	Mean Contact Hrs.	Standard Deviation	N
ESL	54.2	38.2	537
Basic Education	-	-	-
Union Specific	63.2	39.7	126
All Classes	55.9	38.6	663

$F(1,661) = 5.7.\ P < .02$

TABLE 3J
Performance In Terms of Contact Hours As Function of Type of Class
(IUOE Local 30)

Type of Class	Mean Contact Hrs.	Standard Deviation	N
ESL	-	-	-
Basic Education	-	-	-
Union Specific	-	-	0*
All Classes	-	-	-

*No contact hours were reported.

TABLE 3K
Performance In Terms of Contact Hours As Function of Type of Class
(Joint Apprentice Training)

Type of Class	Mean Contact Hrs.	Standard Deviation	N
ESL	-	-	-
Basic Education	26.7	6.2	47
Union Specific	-	-	-
All Classes	-	-	-

TABLE 3L
Performance In Terms of Contact Hours As Function of Type of Class
(Local 144)

Type of Class	Mean Contact Hrs.	Standard Deviation	N
ESL	117.2	78.0	18
Basic Education	48.3	32.4	192
Union Specific	-	-	-
All Classes	54.2	42.8	210

$F(1,208) = 53.3$, $P < .001$

TABLE 3M
Performance In Terms of Contact Hours As Function of Type of Class
(Local 1199)

Type of Class	Mean Contact Hrs.	Standard Deviation	N
ESL	33.0	14.9	19
Basic Education	-	-	-
Union Specific	-	-	-
All Classes	-	-	-

TABLE 3N
Performance In Terms of Contact Hours As Function of Type of Class
(Sky Chef)

Type of Class	Mean Contact Hrs.	Standard Deviation	N
ESL	-	-	-
Basic Education	-	-	-
Union Specific	11.8	11.1	25
All Classes	-	-	-

TABLE 30
Performance In Terms of Contact Hours As Function of Type of Class
(UAW Local 365)

Type of Class	Mean Contact Hrs.	Standard Deviation	N
ESL	12.3	26.2	23
Basic Education	15.7	10.0	9
Union Specific	-	-	-
All Classes	13.2	-	32

F(1,30) 1, NS

TABLE 3P
Performance In Terms of Contact Hours As Function of Type of Class
(UFCW Local 342-50)

Type of Class	Mean Contact Hrs.	Standard Deviation	N
ESL	-	-	-
Basic Education	-	-	0*
Union Specific	-	-	-
All Classes	-	-	-

*No contact hour data were reported

In Table 3A, the results are presented for a total sample of N = 2310 students representing all of the union programs. For each class type, the mean number of contact hours, the standard deviation of the contact hours, and the sample size are presented. An inspection of the means in Table 3A shows that the ranking of the three types of classes in terms of average contact hours were as follows: BED (70.3), ESL (62.3) and Union specific (33.1). For the total group of N = 2310 students, the average number of contact hours was 51.4. The observed differences among the three class types was highly significant in terms of an F test with 2 and 2307 degrees of freedom. It should be noted, that consideration was given to adjusting the class type means for prior differences among the students in terms of various background variables such as age, years of education, and years of employment. However, it was not possible to perform these analyses due to the relatively large amount of missing data on the background variables. The only variable having relatively complete data was age. However, this variable exhibited a relatively low correlation with the contact hour variable.

An inspection of Tables 3B to 3P shows that a significant relationship between class type and contact hours was evidenced for the following programs: District Council 1707 (Table 3E), ILGWU (Table 3I), and Local 144 (Table 3L). For all of the other union programs either there were no significant differences across class types, or the union program offered only a single type of class. The significant results found for the three union programs described above can be summarized as follows:

District Council 1707 - Average contact hours for students enrolled in BED classes (86.2) is significantly greater than the average contact hours for Union Specific classes (49.4).

ILGWU - Average contact hours for students enrolled in ESL classes (54.2) is significantly less than the average contact hours for Union Specific classes (63.2)

Local 144 - Average contact hours for students enrolled in ESL classes (117.2) is significantly greater than the average contact hours for BED classes(48.3).

In summary, it is seen that the ranking of the three types of classes in terms of average contact hours varies as a function of which union is being considered. For the overall group of N = 2310 students, the ranking of the three class types in terms of average contact hours was as follows: BED, ESL, and Union specific.

5. An Analysis of Post-Pre Score Gains in Test Scores for Each Union as a Function of Class Type

Various tests were administered to students as both pre and post measures. For students enrolled in ESL classes the primary measures were the JOHN and Davis tests (scored on a 100 point scale). For the BED classes the primary tests were the TABE and CTBS (scored in grade equivalent units). The Union specific classes were administered various job related measures which were scored on various scales. For purposes of the analysis of gains, classes were designated as ESL, BED, and Union specific in terms of the type of test that was administered. ESL classes were those where the JOHN or Davis test were given. BED classes were those where the TABE or CTBS measures were administered. All other classes were designated as Union specific. In some instances this classification scheme produced some discrepancies with previous designations of class type. However, using the test as the basis of classification assured that all students classified as being in the same class type all were measured on the same type of test.

Since pre and post tests were not administered in all union programs, our results are limited to only a sample of the programs. Tables 4.1 - 4.9 present results for those eight programs where test data were available. Each table is broken down into three sections for the ESL, BED, and Union specific classes. For each class type the following information is provided: pre mean, post mean, gain = post mean - pre mean, standard deviation of the gain or difference, the value of the t-statistic for testing the significance of the gain, the significance of the t-statistic.

TABLE 4.1
Post-Pre Score Analysis by Union and Type of Class*
(ACTWU)

	N	Pre Mean	Post Mean	Mean Difference	Sdev of Difference	T-Value	Signi-ficance
ESL	74	13.3	17.0	3.7	2.2	14.4	$p < .001$
BED**	146	4.7	5.1	.4	1.1	4.0	$p < .001$
Union Specific							

* Class designation was in terms of type of test given; ESL = JOHN or DAVIS; BED = TABE Reading, TABE Math, or CTBS Basic Education; Union Specific = any other test.

** Scores reported are grade equivalents. For the ESL and Union Specific Measures, raw scores are reported.

TABLE 4.2
Post-Pre Score Analysis by Union and Type of Class*
(Computer Classes)

	N	Pre Mean	Post Mean	Mean Difference	Sdev of Difference	T-Value	Signi-ficance
ESL							
BED**							
Union Specific	83	35.5	75.1	39.6	25.8	14.0	$p < .001$

* Class designation was in terms of type of test given; ESL = JOHN or DAVIS; BED = TABE Reading, TABE Math, or CTBS Basic Education; Union Specific = any other test.

** Scores reported are grade equivalents. For the ESL and Union Specific Measures, raw scores are reported.

TABLE 4.3
Post-Pre Score Analysis by Union and Type of Class*
(District 65/UAW)

	N	Pre Mean	Post Mean	Mean Difference	Sdev of Difference	T-Value	Signi-ficance
ESL	175	16.4	32.9	16.4	15.1	14.4	$p < .001$
BED**	37	8.9	10.0	1.1	3.6	1.73	NS
Union Specific							

* Class designation was in terms of type of test given; ESL = JOHN or DAVIS; BED = TABE Reading, TABE Math, or CTBS Basic Education; Union Specific = any other test.

** Scores reported are grade equivalents. For the ESL and Union Specific Measures, raw scores are reported.

TABLE 4.4
Post-Pre Score Analysis by Union and Type of Class*
(District Council 1707)

	N	Pre Mean	Post Mean	Mean Difference	Sdev of Difference	T-Value	Signi-ficance
ESL							
BED**	47	8.4	7.1	-1.3	2.4	-3.8	$p < .001$
Union Specific							

* Class designation was in terms of type of test given; ESL = JOHN or DAVIS; BED = TABE Reading, TABE Math, or CTBS Basic Education; Union Specific = any other test.

** Scores reported are grade equivalents. For the ESL and Union Specific Measures, raw scores are reported.

TABLE 4.5
Post-Pre Score Analysis by Union and Type of Class*
(Hotel Trades Council)

	N	Pre Mean	Post Mean	Mean Difference	Sdev of Difference	T-Value	Signi-ficance
ESL							
BED**	64	8.4	8.3	-.1	1.2	-.5	NS
Union Specific	40	57.9	89.9	31.9	17.9	11.2	$p < .001$

* Class designation was in terms of type of test given; ESL = JOHN or DAVIS; BED = TABE Reading, TABE Math, or CTBS Basic Education; Union Specific = any other test.

** Scores reported are grade equivalents. For the ESL and Union Specific Measures, raw scores are reported.

TABLE 4.6
Post-Pre Score Analysis by Union and Type of Class*
(IBT Joint Council 16, Local 237)

	N	Pre Mean	Post Mean	Mean Difference	Sdev of Difference	T-Value	Signi-ficance
ESL							
BED**	23	8.2	9.0	.8	.8	4.5	$p < .001$
Union Specific	110	70.8	80.8	10.0	5.1	20.5	$p < .001$

* Class designation was in terms of type of test given; ESL = JOHN or DAVIS; BED = TABE Reading, TABE Math, or CTBS Basic Education; Union Specific = any other test.

** Scores reported are grade equivalents. For the ESL and Union Specific Measures, raw scores are reported.

TABLE 4.7
Post-Pre Score Analysis by Union and Type of Class*
(ILA Local 1814)

	N	Pre Mean	Post Mean	Mean Difference	Sdev of Difference	T-Value	Signi-ficance
ESL							
BED**							
Union Specific	6	2.5	3.0	1.3	1.5	2.2	NS

* Class designation was in terms of type of test given; ESL = JOHN or DAVIS; BED = TABE Reading, TABE Math, or CTBS Basic Education; Union Specific = any other test.

** Scores reported are grade equivalents. For the ESL and Union Specific Measures, raw scores are reported.

TABLE 4.8
Post-Pre Score Analysis by Union and Type of Class*
(Joint Apprentice Training)

	N	Pre Mean	Post Mean	Mean Difference	Sdev of Difference	T-Value	Signi-ficance
ESL							
BED**	28	6.9	7.2	.3	1.2	1.2	NS
Union Specific							

* Class designation was in terms of type of test given; ESL = JOHN or DAVIS; BED = TABE Reading, TABE Math, or CTBS Basic Education; Union Specific = any other test.

** Scores reported are grade equivalents. For the ESL and Union Specific Measures, raw scores are reported.

TABLE 4.9
Post-Pre Score Analysis by Union and Type of Class*
(Local 1199)

	N	Pre Mean	Post Mean	Mean Difference	Sdev of Difference	T-Value	Signi-ficance
ESL	11	47.5	50.5	3.0	10.4	.96	NS
BED**	-	-	-	-	-	-	-
Union Specific							

* Class designation was in terms of type of test given; ESL = JOHN or DAVIS; BED = TABE Reading, TABE Math, or CTBS Basic Education; Union Specific = any other test.

** Scores reported are grade equivalents. For the ESL and Union Specific Measures, raw scores are reported.

It can be observed in Tables 4.1 - 4.9 that significant gains were achieved for ESL classes for the ACTWU and District 65/UAW programs. The respective average gains are greater than one standard deviation unit. Assuming that the gain scores are normally distributed, an average gain of at least one standard deviation unit implies that for more than 84 percent of the students there was a positive gain. Statistically significant gains were also achieved for the BED classes for the ACTWU, IBT Joint Council 16, Local 237 programs. For these two programs the average gains in terms of grade equivalent units were .4 and .8 respectively. It should be noted that for the BED classes for District Council 1707 (Table 4.4) there was a negative gain. This result may well be attributable to missing data problems. For the Union specific classes, significant gains of nearly 1.5 standard deviation units were observed for the Computer Classes program (Table 4.2), the Hotel Trades Council (Table 4.5), and the IBT Joint Council 16, Local 237 program (Table 4.6).

One can summarize the results appearing in Tables 4.1-4.9 as supportive of the hypothesis of positive gains in test score performance for the three types of classes in various union programs. However, the generalizeability of these results is somewhat limited by the fact that paired pre and post data were not available for many of the students.

6. The Computer Data Base

As previously noted, all of the statistical analyses presented in this study were based on student data obtained from the ALLIES data base management system with the aid of the Literacy Assistance Center. The data were contained in three different computer files (a) a Student file containing student demographic information (birth date, gender, ethnicity, educational background, employment information, primary language), union membership, and the student's objective for enrolling in courses, (b) an Impact file which contained information concerning the achievement of objectives (outcome), contact hours, class codes, and class type, (c) a Test file which contained pre and post scores as well as test and class codes. In order to analyze the achievement of objectives as well as the contact hours as a function of class type and union program, it was necessary to match the Impact file to the Student file. This matching was done through the use of a 10 character identification code available for each student. The resulting merged file contained N = 3775 cases. In order to analyze the post - pre score gains on various tests, it was necessary to match all of the pre score records in the Test file with all of the post score records. This matching was done both in terms of the student identification code and the test code. Since union membership was added to each record in the Test file, it was not necessary to match this file to either the Student or Impact file.

Various difficulties were encountered in matching the original data as well as in statistically analyzing the merged data sets. Some of the problems are rather minor in nature while others are more serious. Attention to these issues will greatly facilitate any future attempts to export the data from the ALLIES program and analyze it using various statistical packages. Each of the problems will be presented next together with a series of recommendations.

Invalid Entries

(a) Each union program was represented by a three letter code in the Student file. Unfortunately, this code was uninterpretable for N = 34 cases due to spelling errors.

(c) Numerous instances of misspelling of class and test codes were found. For example, the second letter in the JOHN test was sometimes the numeral "0" rather than the letter "O". The same type of misspellings were found for class codes. For example, for class codes containing the letter "O", the number zero was substituted in some cases.

(d) The data used in the current report were based on student performance during the years 1989 and 1990. However, for N = 94 cases, appearing in the Impact file ,the start date ranged from 1946 to 1988. In addition, the start date was missing for an additional N = 206 cases. All of these cases were excluded from the data analyses.

(e) Variables such as test scores and contact hours were not "right justified". For example, contact hours were recorded as a three column field in the Impact file. A value such as 8 contact hours was recorded in three different ways: 8 _ _, or _ 8 _, or _ _ 8. This type of formatting of numerical data would not be problematic if it is documented, i.e., users of the data base were informed beforehand of this manner of recording data. Without this information, these numerical values may well be incorrectly read by other computer programs.

It is clear that the problems described in a-e can be readily addressed by either carefully editing the data before any analyses are performed or by defining admissible values for various variables (e.g. start year cannot be less than 1989) and rejecting any out of range values. Although these problems are relatively easy to correct, failure to do so can result in inaccurate and biased statistical analyses.

Missing Data

(a) It is recognized that missing data on certain variables is beyond the control of the program staff. In some cases students will simply refuse to offer certain types of information. In the present study this was the case for some of the background variables such as years of employment. However, for other variables the problem of missing data should be correctable. One such variable is the three letter union code for each student in the Student file. This variable was missing for N = 634 of the N = 3775 cases in the Student file. This missing information in effect reduced the available sample size. In some of these cases union membership could be identified in terms of the class code.

(b) As noted in Section 3, information with respect to class type (ESL, BED, Union specific) was not identified for N = 516 of the N = 3775 students.

(c) The results presented in Table 2A Section 5 showed that objectives were achieved for only 995 of a total of N = 3259 students for whom class type could be identified. For the 2264 students who were recorded as not achieving their stated objective, there were three ways this result could occur.

(i) First, 794 students appearing in the Student file simply did not appear in the Impact file. All of these students were assumed not to have achieved their objective.

(ii) Second, 543 achieved an objective that was different from the stated objective.

(iii Third, 927 students simply had a blank field for the outcome variables.

The negative outcomes for the 1470 (543 + 927) students described in (ii and (iii) are problematic. An inspection of the original coding sheets for the N = 543 students described in (ii) showed that for some of these cases there simply were errors in recording the outcomes. For the 927 students described in (iii), it is not clear whether this blank field for the outcome represented the failure to achieve an objective or simply the failure to record an outcome. In other words, it is not clear when the outcome is negative and when it is missing. Treating these blanks as a negative rather than a missing outcome may result in the achievement rates being underestimated. The proper manner for dealing with this problem is to reserve a blank for missing outcomes and use some non blank code to denote failure to achieve an outcome. This is a standard practice in many statistical programs.

Inaccurate Data

(a) Although the Student file contains a single record for each student, the Impact file was found to contain in many cases multiple records for each student. In some cases this was due to the fact that the student was registered in more than one course or simply due to the entry of duplicate records. However, in some cases it was found that the data for a single student in a single course was entered at different points in time. These multiple records can produce inaccuracies in recording the contact hours for a student. In some instances it was found that the recorded contact hours represented a type of running total. In other words, it was only the final record which represented the actual contact hours, all other values were intermediate totals. It is important that this type of data entry be avoided since it may result in overestimates of contact hours.

(b) The Allies data base is structured so that each student appears only once in the Student file but possible many times in the Impact file. The latter result is due to the fact that a student may enroll in more than a single course. A situation then arises where a single objective is recorded for a student in the Student file, but many outcomes can be recorded in the Impact file. This is not problematic if we assume that a student has the same objective for every course. In this case, one searches through the multiple outcomes for a match with the single objective. However, if students have different objectives for different courses, the structure of the data base does not allow for a proper matching. The solution to this latter problem is not clear.

(c) Throughout this report we have avoided the reporting of total contact hours, only average hours are presented. This distinction is important since for the N = 3259 students for whom class type was identified, contact hours were missing for 949 students. Reporting the total contact hours and the total sample size can result in average contact hours to be underestimated. It is important when reporting total contact hours to also report the sample size for the non missing observations rather than the total sample size. This issue arises as part of the report issued by the Allies program.

Documentation

(a) The Allies data base program generated various reports summarizing certain key aspects of the data. One set of results is a frequency tabulation of the contact hours as a function of program and class code. It was found that some of the designations of classes as ESL, BED, and Union specific were incorrect. In other cases certain classes were not included in the report.

(b) The data base is structured in a form where multiple records for a single student are found in both the Test and Impact files. The Student file has a single recorded for each student. It would be useful to describe this structure as part of the documentation for the data base. It is especially important when the data are being exported to other programs.

Summary

The introduction of a computerized data base management program represents an important step in developing more efficient and accurate procedures for documenting student progress. The Workplace Education Program is to be commended for implementing such a system rather that depending upon more informal recording systems. The criticisms we have raised in this section are meant to be constructive in nature. It is not surprising that a newly instituted system has need of some "fine tuning". It is felt that none of the criticisms that have raised require any major modifications in the current system.

7. The Evaluation of Staff Training Efforts

The following report was prepared by Dr. Shirley Feldmann of the City University of New York. It represents the first in-depth analysis of the Consortium's staff training efforts to date. Extensive staff training and curriculum development activities are documented. As a group the unions studied have put much thought and effort into the following activities: staff training, self-analysis of these efforts, and ongoing activities to improve their teacher training initiatives. This report serves to systematically describe insights and recommendations that in many instances were derived from Consortium personnel themselves.

Description of the Programs

The Consortium for Worker Education, sponsored by the Central Labor Council, is a collaboration of 21 member Unions, each of whom sponsors literacy programs for their workers and families. The programs are financially supported by the State Education Department and by the New York City Board of Education, as well as by the Unions themselves. Each program has a full or part-time Director and also may have Instructional Facilitators and Curriculum Coordinators who work with the Director. The Consortium itself has a full-time Coordinator, Dr. Francine Boren-Gilkenson, who oversees the efforts of the literacy programs and also provides central staff training for the administrators and teachers of the various programs.

The majority of the teachers in each Union program work on a part-time basis, and each is employed by one of the three funding sources, depending on the type of program. While many teachers hold full-time positions in the New York City school system, others work outside of the educational establishment. Most of the teachers teach one class, usually meeting two sessions per week, but some teach more sections. Some teachers have been with the literacy programs for five years or more.

Literacy classes range from Literacy Education, that starts at the beginning reading-writing level, through a number of progressively higher levels to GED (high school equivalency) and pre-college classes, in which a number of academic subjects are taught. In some classes an occupational skill, such as skilled garment work (pattern making), is combined with literacy skills; these classes have two specialist teachers using a team-teaching approach. There are also ESL, Bilingual and other-language literacy classes at the various skill levels. While English is the most frequent language of instruction, classes are also given in Spanish and Chinese. Classes are held in the evenings and on Saturdays at many sites in the city, many of which take place in public school or in union halls.

Students enrolled in the programs are typically new immigrants or members of minority groups who are working full

time in entry-level jobs. They range in age from 18 to the upper sixties, and have in common a desire to better themselves educationally and occupationally. Many do not speak English as a first language.

Philosophy and Staff Training in the Programs

The CWE/CLC program began six years ago with an approach to literacy education which combined relevant content area materials with language learning. As described by the Consortium, this approach centers on the theory that learning builds on knowledge, interconnects and must be taught in language based reading and writing classrooms. Students' own past experiences and knowledge are viewed as important curriculum resources, and student input is seen as a major program goal. This approach incorporates students as active participants in their own learning. The program goal is to "empower" students to take charge of their own learning by enabling them to acquire the basic tools necessary for learning. Accompanying this skills development is students' heightened confidence in themselves as learners and as members of the larger community. The program views literacy learning as an integral part of the daily experiences and development of the students. In keeping with this philosophy, the program has implemented a holistic language approach to literacy in which reading, writing, speaking and listening are taught in an integrated manner. According to Dr. Boren-Gilkenson, the staff development efforts of the Consortium have centered on implementation of this educational philosophy. These efforts are documented in this report.

This view of literacy learning is not shared by many other educational establishments. Therefore, the emphasis of the staff development effort has been to enable teachers in the program to fully understand its implications and to provide experiences in organizing courses and teaching students within this framework. Staff training is seen as a critical means of supporting teachers and enhancing their skills as they continue to provide an appropriate learning environment for their students.

Some obstacles to implementing such a staff development program are built into the structure of Adult Learning operations and programs including those of the Consortium program as well. Since most teachers have weekday work obligations, in addition to their literacy courses, there is often too little time available for meetings with the staff or for interactions with their peers. Another complication is the lack of funding for paid staff development time. In addition, some teachers are isolated from other teachers because classes are held at widely scattered sites. At some sites, amenities such as curriculum resources, duplicating facilities and storage space, may not be available. The students themselves must mesh their job and family obligations with their evening or weekend literacy classes. In many cases, they need considerable time in class before they begin to take an active role in their own learning. And lastly, the Directors and staff themselves often have limited contact

hours with their teachers, especially if a Director is employed on a part-time basis.

The staff training procedures for the 1989-90 school year, took place within the context of these constraints. Staff development activities took place at the local (union) level as well as the central Consortium level. Thus a "menu" of support activities were offered to teachers throughout the year. Both types of activities are described in this report.

Evaluation of the Programs

The task presented to the evaluator was to examine and evaluate the local 1989-90 staff training programs for four selected Unions of the Consortium, as well as to evaluate the responses in centrally sponsored workshops and one conference. These selected Unions include: (a) the Amalgamated Clothing and Textile Workers Union (ACTWU), (b) International Ladies' Garment Workers' Union (ILGWU), (c) Teamsters Local 237, and (d) United Automobile Workers 65 (UAW 65). These Unions were selected by Dr. Boren-Gilkenson as providing representative literacy programs in the Consortium.

Interviews were conducted with the Director and other members of her staff of each Union, and in some cases, with teachers in the individual program. Efforts were also made to interview students from each program, but because of time constraints, no opportunities to do so were available. Only one teacher was located for an interview, for the same reasons. Several of the present staff members were formerly teachers, and they also gave their reactions to staff training from the perspective of their former roles as teachers. The information gathered represents primarily an administrative view of the training programs.

During the interviews two areas were discussed, (a) the local efforts of the Union's staff to provide training and development for their teachers, and (b) their reactions to the centrally sponsored workshops and the conference provided for administrators, teachers and students from the Unions. Information concerning the local staff training of the four Unions will be presented first. A later section will contain the reactions of the staff to the Consortium-sponsored workshops and conference, along with a summary of the information from the evaluation forms returned at each workshop and the conference. A summary section will then follow.

Staff Training- Local Efforts

Information from the interviews of staff members from each of the four Union program are presented separately below.

Amalgamated Clothing and Textile Workers' Union

The interview concerning the ACTWU literacy program was held with Rosana Wong, the present full-time Director of the program,

and with Debora Buxton, a full-time Curriculum Coordinator. Paula Finn, Director until March of 1990, was also present for part of the meeting. Ms. Wong had previously been a teacher in the program.

The program is in its fifth year, and in the 1989-90 year had 670 students enrolled in 22 ESL classes and in 12 classes conducted in Spanish which include high school equivalency classes and literacy classes. Students are placed in classes according to their expressed stated purpose for entry into the program. Many students participate in both the English and Spanish-language classes. In addition, some ACTWU students are enrolled in a Consortium sponsored summer pre-college course for those going on to college in the fall. Classes are given at one site in Brooklyn and two in Manhattan, in the evenings and on Saturdays. Students are about 90% Spanish-speaking, with the remainder mainly of Haitian origin. About equal numbers of men and women participate, and their ages range from about 18 to the 60s. The younger group are mainly enrolled in GED programs and there are proportionately more older women in the Spanish literacy classes. The director states that there is continuity within the program and students tend to stay until they are ready to leave and move on to other educational opportunities. There are 22 teachers, with four of them employed on a full-time basis. There were four or five new teachers in 1989-90. There has been little turnover in recent years and the staff views this as a positive outcome of both the teacher selection process as well as staff training and development activities.

Much of the work of the staff in the past year has been focused on strengthening the holistic learning approach and the student-centered learning philosophy that has been evolving in the Consortium. Staff development takes place within the context of teachers and students learning together. Toward that effort, the staff has worked on developing a community of mutual support among the staff, teachers, and students. For students, several programs have been developed to provide opportunities to take a more active part in their own learning.

A Student delegate system was instituted three years ago that is made up of delegates elected from each class. The group meets every three weeks during the school year, and during the past year began to involve itself actively in many aspects of the program. Delegates maintained an information service for their peers, serving as resources for housing, jobs, etc. In the past, ACTWU staff had distributed end of the year evaluation forms to students regarding the program. The delegates initiated a new student designed form which they felt would more appropriately reflect student concerns and result in changes built on student needs.

Student delegates also played a major role in the publication of a student magazine for International Women's Day. A group of them worked collaboratively in soliciting, selecting and editing the writings submitted to them from class members. Student/teacher involvement in all aspect of the learning process was reported as creating a sense of community by giving all

participants a sense of ownership in the program. Collective decision making was seen as an important outcome of this process.

A student survey designed to assess student needs and interests was developed during the year. As a result of the survey, delegates worked with the staff to develop workshops and information sources for students around themes which emerged from the survey, such as AIDS, worker rights, housing, and college entry. These workshops are viewed as an integral part of the education program and are used to teach language skills in meaningful contexts.

There has been considerable progress in using student delegate input in the program This is a system which grows and changes as the staff and students evaluate their progress. As the program grows the teacher training program has undergone changes and modifications A major focus has been to increase teachers' autonomy in selection and use of curriculum materials. Teachers are encouraged to move away from using the staff-developed thematic units as packages, and instead, to use only the appropriate parts of them. A preferred alternative is for teachers to develop themes around the needs of the students in a specific class. Efforts are then made to support teachers in the selection and evaluation of relevant materials and procedures for their class. The staff is now developing a resource library at the Union headquarters that will be useful for teachers and students in developing curriculum units. The staff now sees their role changing from a supervisor for a fixed curriculum to that of a resource person for emerging curricula.

Another form of training, staff meetings, are also undergoing change. Teachers attend from three to four staff meetings per year at present, but in the next year study groups will be instituted that will meet every six weeks or so. These study groups are seen as important forums for questioning and discussion of the philosophy of the program as well as for building a collaborative network among the teachers. It is felt that giving teachers the opportunity to evaluate and reflect on their own efforts will encourage their own growth. Sharing of problems and successes is seen as an important avenue for helping teachers to see how learning can become an integral part of the students' lives, rather than being conceived as isolated skill learning in the classroom.

The staff at ACTWU is highly motivated and often attend meetings on a voluntary, unpaid basis. This is of concern to the administrative staff who are always looking for funding sources to pay teachers. Funding for staff development activities has been an issue in adult education in general and ACTWU is determined to find ways to pay staff whenever they can.

ACTWU has undergone a drastic change in its approach to teacher observation as a method of staff development. The traditional teacher observation has been replaced by having a member of the administrative staff teach a lesson to the class of a teacher who is being visited. This gives the administrator a sense of the teaching-learning situation created by the teacher and allows the administrator an opportunity to gather important information for feedback. Administrator and teacher then engage

in a reflective dialogue about teaching and learning in general as well as in relation to the classroom in question.

Another form of staff development is team teaching. Teachers worked with each other or with a coordinator in designing and implementing materials for class sessions. The teachers in the team learned from each other and some became more active teachers as a result. The effort will be expanded in the coming year.

New teachers are selected carefully, according to the staff, so that their views about education are consonant with those of the program. There are no special search procedures for candidates. Prior teaching experience or educational credentials are not crucial. At the job interview two staff members engage the interviewee in a discussion of the program's views and current educational issues. Teacher orientation, philosophy, flexibility, and background, are all evaluated in making hiring decisions.

New teachers are briefed extensively before classes start and are given the available curriculum materials. Teachers of similar classes may also work with the new teachers. It is important from the start that the new teacher understand that the curriculum guides are resources to be used only if needed or appropriate, but they should not be used from cover to cover. The staff felt that new teachers soon join the existing informal network that the experienced teachers have formed to support each other. Networking too is seen as a valuable form of training among teachers.

International Ladies' Garment Workers' Union

Staff Interview. The interview at the ILGWU headquarters took place with Tracy Gross, Director of the Worker-Family Education Program, and two staff members, Deidre Freeman, Curriculum Developer, and Maureen Lamar, Instructional Facilitator. All are employed full time. The program is large, offering 70 classes with a total enrollment af 1500 students. Most of the classes are English as a Second Language. Seven of these classes focus on a citizenship curriculum and seven of the classes combine garment skills instruction with English language instruction. There are also three GED classes. There are nine sites in New York City area and one in Westchester county; these are located mainly in Union halls, but with some classes in schools and factories. About 80 to 90% of the students are women, with about a third of them of Asian origin and the other two-thirds of Latino background. All are immigrants.

The teachers in the program are for the most part experienced full-time teachers in the public schools, who teach in the program on a part-time basis. There is a low teacher turnover which staff attributes to the interview process as well as ongoing staff development activities.

The philosophy of the program is consonant with that of the Consortium, in that it is learner-centered and has a holistic approach to teaching literacy skills. A central aim of the

program is to encourage maximum participation of the students in their own learning. Student participation includes classroom input which is encouraged by both staff and teachers. Outside the classroom, students participate in councils which advise staff regarding curriculum priorities, testing, evaluations, and class offerings. The councils have helped students to voice their concerns about the achievement tests given in the program, and have worked with the staff and teachers toward a solution of the problem. They have also helped prepare roundtables for discussion of curriculum issues, and are now in the process of developing program evaluations for use by the students. These activities not only establish more links between the students and teachers but they also serve as means of empowering students as active members in their educational community. Student councils also organize cultural exhibits and assemblies as well as social activities.

Another activity that has widened participation among students and teachers is the publication of student-developed magazines at each site. In the two years since its inception the quality of the participation has increased dramatically. Writing has been a major focus of the program and staff development workshops have introduced strategies and techniques to be used in the teaching of writing at all levels of ESL instruction. The administration plans to continue writing workshops in the coming year when a new magazine focus will be introduced. The intent is to have each class produce a chapter of the magazine.

A curriculum guide prepared for the 1989-1990 school year contains orienting statements concerning the purposes of the program, descriptions of students, and general information for conducting classes. The guide next details the foci of the program, supplying a sample curriculum as an illustration of the program aims. Concrete examples of the major components of the program are given next. The curriculum guide is a well articulated statement of the program's workings, and its clear organization and concrete approach make it easy to use.

Teachers also are given a calendar for the year listing meeting dates, conferences, trips and other activities. A periodic newsletter, called Approaches, contains lesson ideas on various topics for different literacy levels, many of them contributed by teachers in the program. Other items of interest, such as conferences, resources, and professional organizations, are also described.

Specialized curriculum materials focused on a theme are prepared by the staff for those teachers who may be interested in pursuing that topic. One such curriculum guide uses the Lawrence strike of 1912 as its central theme, and it includes language-related learning activities with the informational materials. Other curriculum materials deal with Health and Safety and with technical skills needed in the garment industry.

In addition, monthly materials are sent to each teacher featuring special events of that month, such as Black History month, Christmas holidays, Election day, and such. These materials also include resource materials such as stories, articles, and dramatizations that may be useful in classes, along

with practice materials for reading, writing, and oral language use. A curriculum library containing these and other materials is maintained at each site for teacher use.

Staff meetings are held monthly by site and by teaching days; these are used for discussion of curriculum, sharing of ideas, and other issues of interest to the teachers.

The staff also works with teachers individually in several ways. They are available to discuss specific problems or ideas and they come to a class to observe. Also they demonstrate teaching procedures and co-teach lessons with the teacher. Teachers are then asked to do two follow-up lessons. Staff help teachers to evaluate progress. This past year the staff used this last procedure to model writing activities, which were considered to be weak links in the holistic approach. Eight teachers participated, who then were asked to follow up with their own lessons. Limited success was achieved on increasing writing in these classes. Some teachers are resistant to writing activities because they are unsure of their own writing competency. Others have trouble integrating writing into low level English classes. The results of this pilot study were judged to be positive in that many teachers discovered writing strategies that they could integrate into their classes. Efforts will continue in the coming year to emphasize the importance of writing.

One pilot project enabled teachers who teach the same level of ESL to observe one another teach. The staff felt that this experience helped them overcome the isolation barrier common in adult programs. They appreciated the opportunity to observe another staff member as well as communicate with others in the program. However, they had difficulty in giving a critical analysis of each others work.

Teacher observations are made each year as required by funding agencies. These are not considered vital sources of information.

Some concerns have been flagged for more attention in the coming year. In the program which combines technical skills with language learning, it has been found that the technical teachers are less involved in the holistic approach than are the language-arts teachers. More effort will be expended to help them to integrate their curriculum with their team member and to develop a real team-teaching approach. Also, meetings this summer will attempt to define the roles and responsibilities of delegate and teacher regarding curriculum and classroom procedures.

Teacher Interview. A teacher who taught in the program during 1989-90 commented on the various staff training efforts. This teacher is experienced and both understands and embraces the student-centered, holistic learning framework for literacy learning. She felt that the staff development was excellent and the monthly meetings were helpful. She received frequent support when staff members were at her site. She liked the self-questioning stance taken by the staff, for it helped her to develop as a teacher. She also liked the curriculum materials,

especially the how-to-do-it sections. She commented that the materials were easy to adapt to the needs of her students.

She also felt that the publication of the magazine at each site by the students was successful and should be continued. Because writing had a major focus in her class she felt that her students were well-prepared to participate, and some became very involved. She felt that the observations by teacher teams of each other's class did not work out well. Much of the interaction, she felt, stayed at a politeness level rather than exploring each other's style and procedures. The missing element was trust in each other, which she felt could come only with careful selection of teachers with compatible styles and competency levels, as well as with repeated contact with each other in the classroom.

She also felt that the Student Council at her site had not functioned as well as the other student councils. She attributes this to a greater need for a sense of community at her particular location. Plans to revise the delegate system at this site are underway. The teacher's suggestion that the staff needed to give more direction to both students and teachers on how the viewpoint of the program was to be implemented will be incorporated into the future plans . Also to be included is more emphasis and demonstration of the educational goals, as well as some intervention when students or teachers are off track.

She preferred the teacher meetings which were on relevant specific topics, with demonstrations of teaching skills, followed by teacher discussion and participation. She would like to see more opportunity for general discussion among the teachers of lessons, resource books, ideas that work, etc. There is considerable need for teachers to share and question since they are involved in a collaborative effort.

Teamsters Local 237

The interview concerning this program was undertaken with Pauline Goodrich, Director on a half-time basis, who had started in the position in January 1990. The previous Director was not available for interview. Two part time curriculum coordinators and three para-professionals also work with the director. Responsibilities for staff development activities are shared by the director and the curriculum coordinator.

In 1989-90 the Union offered 14 classes for students preparing to take Civil Service exams in heat plant maintenance. These classes were team-taught by both technical and language instructors. In addition, one ESL class and two GED classes were given. Other classes were organized whenever the need arose. All classes are held in a public school in Manhattan.

About 400 students were enrolled in the combined classes. The students in the heat plant technician program are already working in apartment maintenance and wish to move up the career ladder by obtaining a heat plant certificate. The course is open to all who apply. Students in the ESL and GED classes are mainly Latino and Haitian.

The heat plant technician course combines language-arts skills with technical skills so that students may learn a specialty within the framework of literacy skills. The GED program is open to anyone who is motivated to join it. The ESL class is a more recent addition and more sections may be added in the coming year.

The Language Arts, ESL or GED teachers usually have full-time jobs in the public school system, and work part-time in the Union program. The technical teachers, who are paid by the Union, are skilled technicians who work in heat plants during the day and teach these skills in the evening classes. They do not have pedagogic training or traditional educational credentials. According to the Director, both groups are committed to their students but a problem occurs between them because of the differences in their backgrounds. The philosophy of the program supports the concept of a holistic language emphasis and concern for addressing the educational needs of the student broadly, rather than teaching isolated skills.

Staff training efforts include teacher meetings, conferences and observations made by the staff. New teachers are often paired with more experienced teachers and are observed by members of the staff. All teachers are formally observed each year, but there are often additional informal observations, with feedback given later to the teacher.

Staff training efforts have undergone modification over the past year, and plans have been made for more changes in the coming year. In the past there was no contact between the teachers who taught on Mondays and Wednesdays and those who taught on Tuesdays and Thursdays, as staff meetings were held separately on one of their work days. Last year the Director brought the two groups together and they found that they had many mutual needs and concerns for their classes. A committee was formed to maintain the contact between the two groups and to encourage their initiative.

The teachers were asked to do a needs assessment during the past year, and through it identified a number of issues that had not surfaced before. Many of the modifications presented below were suggested in that assessment.

In the coming year teachers will meet before the students begin classes to plan their curricula and to discuss classroom procedures. The needs assessment indicated that preparation beforehand by the teachers for setting mutually agreed-upon class procedures will preclude problems. It is important that teachers work together to agree on procedures and then set the tone in their classrooms by maintaining those standards.

The needs assessment also indicated that student retention was a problem. This was attributed to the administration of standardized tests early in the school year and also to the fact that student needs and program goals were not articulated. It is planned to have teachers contribute to a student handbook describing the programs and expectations for students, as well as the emphasizing the importance of students' own motivation and active participation in enhancing their skills. Students will be given more orientation toward the program they enter and will

have the opportunity to talk with their teachers about their goals and their work in the program. The paraprofessionals will be given time to work with the students. It is hoped that teachers can also do more counseling with their students if they are given a more flexible schedule.

Another effort during the coming year will be to give more time to the teacher teams so that they may plan for and carry out team teaching. At present the technical teacher is seen as the "real" teacher by the students, while the Language-Arts teacher's program is often viewed as non-essential. The Director will institute provision for practice team teaching, with feedback from the staff, to help the two teachers coordinate their efforts into a more holistic program.

According to the Director, some of the teachers have traditional viewpoints and they resist trying out collaborative holistic approaches. Efforts will be made in the coming year to help teachers develop a variety of methods and materials for their classes, especially in increasing visual materials and handouts that might be useful to the students when they are in the workplace. The lack of copying facilities at the school which is a major complaint from both the teachers and the staff will be addressed by the union in the coming year. Plans are underway to have a copier at the site.

During the summer months curriculum materials will be developed by the staff for the three programs. A major priority will be to integrate the Language-Arts and heat plant curriculum so that teachers and students alike can see the benefit of the combined program.

United Automobile Workers /65

The interview at UAW/65 headquarters was conducted with Toby Emmer, Director, who is full time, and with Sylvia Tyler, a part-time Curriculum Coordinator. There are two full-time members of the staff at present, with several part-timers such as Ms. Tyler. There are 34 classes, with about 550 students in the program. The program offers GED classes, with several of them taught in Spanish, college-prep, ESL, and literacy classes. Classes are taught at ten sites throughout the city.

There are 30 teachers in the program; 20 have been at UAW/65 long term. The staff has shown great stability over the past four years with the result that only two new teachers will be hired in the coming year. The director attributes this success to the community spirit which has developed among the staff over the years.

The program philosophy centers on the educational needs of the students. Accordingly, the staff emphasizes curriculum development by the teachers based on students/workers needs. To that end, students are interviewed individually to ascertain their needs in regard to the program and set both long term and short term goals as part of the interview process. Most students have a long-term goal of passing the GED exam. This program is unique in that it provides access to GED classes for all students

reading above the literacy level. Unlike most programs, no standardized tests are given. Literacy is assessed by the students ability to fill out the registration application. There is ongoing self assessment in the classes and students have realistic expectations of their ability to pass the GED exam. The result has been a retention rate of 80-90 percent.

It is felt that the high dropout rate in many literacy programs is directly related to the labeling of students by standardized test results. Instead, the program supports the idea that traditional placement based on standardized tests can discourage rather than encourage students. Students themselves should define the work needed to reach their educational goals. Then they need to be encouraged to create the educational system in which this is to take place. Through counseling and self assessment the students come to understand that reaching such goals may take several years, but the opportunity to define their own needs and work toward them within a GED class gives them the motivation and confidence needed to succeed.

A brochure is being prepared to help prepare prospective students for the program. The college-prep students are also given information and counseling for entering area colleges. Students are supported at all stages of their stay in the program, no matter what their needs.

The director is a facilitator and resource person whose role is to support and implement the program philosophy. This is done through daily interaction with teachers, students, and support staff, as well as with group meetings and training sessions. The program supports the idea that training and staff development activities are ongoing and should be offered by a variety of personnel including the director, support staff, teachers, and students.

Staff training takes several forms in the program. Curriculum guides for GED and ESL programs have been developed and are available to the teachers. Teachers have helped to develop some of these materials. Teachers themselves also help to alert their peers to available resources. There are additional resource materials available at Union headquarters, but for teachers whose sites are farther away such resources are limited. That problem will be addressed in the coming year.

Staff meetings were held four times during the past year to discuss specific issues, such as introducing more writing into the curriculum, or for exchange of ideas by teachers. In the coming year, monthly meetings will be instituted to allow for more interchange among teachers, especially among teachers of similar classes, so that more links among them may be established. Communication among teachers, as well as with the staff, is considered to be an important goal in the program. Teachers are paid for staff training. The director feels that teachers put in a great deal of voluntary unpaid time and merit payment for all meetings. She arranges payment in a variety of ways. The additional time for monthly meetings comes from occasional shortened classes, a procedure that is accepted by both students and teachers.

Staff members visit each site frequently to be available for interacting with teachers and students, as well as to establish their presence as facilitators. Contacts with teachers are frequent and largely informal. There is, however, an observation of each teacher by the staff every year.

Next year a workshop is planned to share the information from the student interviews, and to discuss ways of using that information in planning the curriculum. Efforts to involve students in planning curriculum have not been entirely successful and more work is needed on collaborative procedures for teachers and students. It is important that both teachers and students feel comfortable and have confidence that the curriculum will meet the students' needs.

Throughout the interview process, the director and staff assessed a need for more math skills for the GED classes. A math facilitator will be joining the staff soon, so that those students needing math skills may have their needs addressed.

Centrally-Sponsored Staff Training

Three workshops and one conference were sponsored centrally by the Consortium during the 1989-1990 year for teachers, administrators and students from the various union programs.
(a) The first workshop presented by Hilary Stern of the Association for Community Based Education was designed for ESL teachers, students, and administrative staff.
(b) The second workshop was presented by Dorothy Suecoff, a staff member and was designed for High School equivalency teachers and administrative staff.
(c) The third workshop presented by Jori Phillippi of Performance Plus Literacy Consultants was designed for teachers who combine technical content materials with skill learning. Administrative staff and students were also invited.
(d) The centrally sponsored Consortium conference was open to all Consortium members including teachers, students, and administrators. Consistent with the theme of the conference, "teachers and student partners in learning", both teachers and students led workshops and spoke at the conference.

At each of these workshops and the conference, evaluation forms were provided to the participants in order to elicit feedback concerning the effectiveness of the presentations. In addition, staff members of the four Union programs also gave feedback on the workshops and conference during their interviews. These two sources of information are summarized separately.

ACBE Workshop

The workshop sponsored by the Association for Community Based Education (ACBE), entitled "Literacy for Empowerment", was held on a weekend, November 4 and 5, 1989. Hilary Stern was the facilitator of the workshop. The workshop was open to 35 ESL

teachers, students and administrators. The purpose of the workshop was to model collaborative learning and problem-posing strategies and techniques for use in the ESL classroom. This model is consistent with the whole language approach supported by the Consortium staff development efforts.

Results from the Evaluation forms. Two open-ended evaluation forms were circulated, one from the Consortium's Central office that had eight questions, and one from the ACBE staff that had similar questions. Because of the overlap, only the one question from the ACBE form, judged to be different from those on the Central office form, was tabulated. There were 14 Central office questionnaires received and 16 ACBE questionnaires. It is not known to what degree the two samples overlapped.

The Central office questionnaire responses were generally positive. When asked what they had learned from the conference seven teachers mentioned obtaining new ideas and techniques for their classrooms. Five teachers indicated that they had become more sensitive to student problems and were now aware of student perceptions of classroom problems, such as lateness. Other comments included having information exchange and receiving support from other teachers in the group, developing a better perspective on issues, and learning how to empower students as well as to involve them more in their own learning.

The concepts they felt were important were teaching ESL and literacy classes from a problem-posing perspective (nine teachers) and how to focus on student-centered issues and needs (five teachers). Other concepts mentioned were use of hands-on activities, administrative issues with such an approach, using a writing approach , and student-teacher dialogues.

Teachers were less confident that they could apply what they learned in the classroom, with five responding affirmatively and nine responding in a more tentative manner. Eight of the teachers asked for more follow-up and support activities in their own classrooms, but there was no majority view on how often this should occur. Six teachers felt ready to work with the workshop's approach in their own classrooms , while four were tentative, and four teachers did not respond.

In evaluating the workshop itself, most comments were affirmative, citing the high quality of the facilitator, and the value of approach to themselves. Respondents also hoped to be paid for their time at the conference, and also wanted more follow-up of its procedures in their classrooms. The weekend format was endorsed by six respondents; others cited difficulty with the format but agreed to come again if needed. Six respondents commented on the positive effects of mixing students, teachers and administrators and felt that future workshops should contain the same mix.

The single question from the ACBE questionnaire concerned the effectiveness of the trainer in modeling the problem-posing and participatory learning process during the workshop. The 16 respondents were unanimous in rating her effort as well done.

Evaluations from Interviews. Staff members from three of the Unions commented that the workshop had been an effective and

helpful experience. Staff members from ACTWU and ILGWU adopted the approach for their classes soon after the workshop. The ILGWU staff issued a memo to their teachers, describing possible formats for use. The successful ingredients of the workshop, it was felt, were the facilitator's skill in demonstrating the procedures, coupled with the practice sessions for teachers who could then discuss and share the experience with others. Also important was the chance to examine issues from different points of view, especially from the student viewpoint. One concern that was shared by all was the lack of stipend for participants, especially when it was a two-day conference.

The Consortium Director felt the conference to be a success because its key concepts were put into operation in classes and the workshop supported and enhanced the philosophical stance of the Consortium. It was also the first time that students were involved in a conference. They seemed to learn a great deal from the conference, as did the teachers who interacted with them, and as a result, students will be included in most conferences in the future. This workshop is considered successful enough to be used again with other specialty groups, such as the Technical-Language Arts teacher teams. Dr.Boren-Gilkenson stated the variety of workshop offerings allowed different groups of teachers to attend the workshops. It is difficult, she agreed, to ask teachers to attend workshops when there is no stipend offered. However, many of the Consortium staff are motivated enough to attend on their own time.

GED conference

The second workshop was designed for GED teachers and administrative staff. Two session were held on November 14th and on December 5th, 1989. It was felt that two sessions would give teachers a chance to "digest" the presentation, try out new ideas in their classrooms, and bring back questions and problems to the trainer. The workshop leader, Dorothy Suecoff, a teacher at UAW/65, was chosen because of the success she has had with GED students in the program. The focus of the workshop was helping teachers to incorporate collaborative, language centered approaches to learning in a classroom which provides open access to all students interested in obtaining a GED. Such classrooms generally have a heterogeneous grouping of students.

Results from the Evaluation Forms. Seventeen respondents returned the open-ended evaluation form circulated by the Central office. Responses to the question concerning what the workshop might have added to their teaching skills were varied, including greater awareness of the problems of adult learners, more confidence about one's present skills, learning a way to integrate the disciplines, and having the opportunity for teachers to share experiences. They also mentioned that more hands-on experience would have been preferred in the workshop and that a modeled, rather than a lecture, approach from the presenter might have been more helpful. Six students felt that the major concept addressed was the use of holistic approach to math and science through writing and discussion. Others

mentioned motivation, math terms, whole-text teaching and science and math concepts as the central concepts of the workshop.

Ten of the respondents felt that they could apply what they learned in their own classrooms and five others were less certain. Fifteen respondents felt that follow-up and support activities were needed in their classrooms, but there was no specific agreement about the timing of such activity, more than agreement that a few times would be needed. Seven teachers felt that they were ready to use the procedures, two teachers reported that they already used them and seven others were less positive about adopting the procedures.

When asked for possible improvements for the workshop several respondents wanted more hands-on materials and more demonstrations with the workshop. Others wanted a longer time, with time to practice or to do a lesson. Others wanted more sharing by teachers or more demonstrations by teachers. Remarks generally indicated more a participatory and applied focus for a future workshop.

When asked if they were willing to allow students with a wide range of reading scores to enroll in a GED class, contrary to the usual practice of using achievement as an entrance criterion, reactions were mixed. Five respondents indicated willingness. The remainder of the comments were more hesitant or negative. These responses ranged from unwillingness to allow heterogeneous grouping to doubt that such a system could work. Some asked for more training before attempting such grouping.

Evaluations from Interviews. Comments were limited because only a few teachers from two of the Unions had attended, none were known to have attended from the third Union and the remaining Union contributed the presenter. The teacher who was interviewed felt that the speaker had not convinced her audience of her views because her material wasn't organized in a way to help the audience. The presenter's ideas were good but she could not move beyond her own experience to show teachers how they could integrate such a curriculum within their own framework. As a result, some teachers were quite resistant to the ideas.

The Consortium Director also felt that the GED workshop did not meet expectations because the speaker wasn't explicit about her methods and failed to make connections necessary to help the teachers to apply them in their own classrooms. The speaker did go into the classrooms of some of the participants after the conference, but apparently that support was not adequate. The concepts she discussed are important for successful GED programs, but another try is needed for an effective workshop.

Workplace Basic Skills Training Workshop

The third workshop was designed for teachers who combine technical content materials with skill learning. Approximately 25 teachers, students and staff from the unions attended. Included in the group were technical teachers as well as language teachers.

The workshop was presented by Jori Phillipi of Performance Plus Literacy Consultants. The speaker described ways in which job tasks could be isolated and analyzed and integrated with literacy skills. A number of hands on collaborative activities were presented. Each participant received a workbook of hand-outs and ideas for use in the classroom and a workplace literacy program located in a factory setting was described in detail. The factory program illustrated the techniques and strategies modeled in the workshop.

Results from the Evaluation Forms. An evaluation sheet constructed by the consultant group, that had rating scales for several questions, as well as several open-ended questions, was returned by 15 people. A five-point scale was used for the first sections of the sheet, with five as the optimum rating. Objectives were rated as totally clear (5) by eight of the respondents, while three others rated the objectives as 4. Six people rated the content as exactly as advertised (5), while three rated the objectives as 4 and three rated them as a 3. The value of the presentation was rated as a high (5) by four persons and as a 4 by six persons. Similarly, interest was rated high (5) by three people and as a 4 by six people. In evaluating the speaker's presentation, 12 people felt that she was highly knowledgeable (5), as well as enthusiastic (5). The remaining three persons rated her as a 4 on knowledge, and two people rated her 4 on enthusiasm. Ten people felt that her presentation was highly organized (5), with two ratings of 4 on that scale. The usefulness of the handouts was judged excellent (5) by seven people, with 4 ratings of 4 and four ratings of 3 on that scale. In judging the quality of the facility, three judged it" friendly" (5), while 8 gave a rating of 4, and 4 persons checked a rating of 3.

In the open-ended portion of the questionnaire, the dominant responses to what participants had liked best about the workshop were that teachers had received new ideas for connecting technical and language-arts components, and that teachers could share what they were doing with each other, and that materials were available for the procedures.

As suggestions for improvement of the workshop, the dominant response was that more discussion time was needed for specific problems, that the session should have been longer, and more hands-on activities were needed. Suggestions for improving the speaker's skills were to give more time for discussion, but three respondents felt that no improvement was needed. General comments echoed the remarks made in response to other questions, in that more time, more participant discussion, more specific applications to classroom situations and time to share experiences were needed. About half of the respondents reiterated the usefulness of the session for their own classrooms.

Evaluations from Interviews. There were few comments from staff members concerning this conference, except to say that some teachers liked it because it was skills oriented. The teacher who was interviewed commented that the morning session was exciting because it was skills oriented and provided concrete

ideas. The afternoon session was less substantive, and some teachers failed to see how the curriculum related to their individual classes. She felt that the speaker was both hesitant and defensive about her points, which put off some teachers, especially those who were resistant to her ideas.

The Consortium Director felt that the participants in the workshop need to be more homogeneously grouped enabling teachers to make clear connections between workshop content and their classrooms.

Consortium Conference

Each year the Consortium for Worker Educations sponsors a conference for staff members. the annual conference was held on Saturday, March 3, 1990 at John Jay College. In planning the conference, staff members indicated an interest in having students attend the conference and participate as both registrants and presenters. The resulting conference "Students and Teachers: Partners in Learning", was a unique effort to incorporate the educational philosophy of the Consortium into conference format.

Students participated in the general morning session at which the Chancellor of the City University, Dr. Joseph Murphy, the President of John Jay College, Dr. Gerald Lynch, and seven students spoke. Following the opening session there were two sessions with a variety of hour-long workshops, which were presented collaboratively by students and teachers from various union programs. There were 18 different workshops and each was presented twice.

Results from the Evaluations. The evaluation sheet, which was constructed by the Central staff, was primarily concerned with the individual workshops. Four open-ended questions were given on the evaluation sheet, two concerning the value of the workshops attended, another asking for general learning from the conference, and the fourth question asking for suggestions for the next conference. The sheet had Spanish and Chinese versions of the questions attached to it. Eighty-one questionnaires were returned, 49 of them from teachers and 31 of them from students. Each of the 18 workshops was evaluated separately. Because of the small samples the responses from the students and teachers were pooled as were as the responses from the two sessions of the workshop.

Workshop 1, Cultural Inclusivity, had 11 respondents. They felt that sharing of cultural heritage by the students was important and the session helped focus students on thinking about why they were learning a particular curriculum. Also, it is necessary to involve all students in discussions so they can develop their ideas as well as developing self-esteem.

Workshop 2, Student Language and Life Goals and the Classroom Teacher, had two respondents who gave mixed reviews, one saying there was no practical demonstration of the content and the other saying that he/she had learned from the others in the group.

Workshop 3, Exploring College, had seven respondents. Five said that they had learned what they should know about college

requirements and how to be admitted to college. All comments were favorable for this workshop.

Workshop 4, Developing Curriculum: A Student-Teacher Partnership, had 12 respondents. Typical comments were that they learned desirable qualities for a curriculum that is adaptive to student needs, that they shared information with other teachers, and that the facilitator was good at teaching a student-center class. One respondent felt that more examples and less theory should have been presented.

Workshop 5, Students as Teachers, had 11 respondents. Comments included that participants learned about paradigms, how to change ideas, how to be flexible in the classroom, and about different methods of teaching. Some respondents felt that the facilitator was good and there was good student participation.

Workshop 6, Using Writing to Explore Early Work Experiences, had seven respondents. They felt that they understood better how to write an essay and how to get ideas for writing. They liked sharing work experiences with others and writing to explain themselves.

Workshop 7, Student Produced Publications, had two respondents who commented that they learned how students and teachers could work together and how students could learn to express themselves better.

Workshop 8, Community Issues in an Adult Education Program, was combined with Workshop 18, Using Labor Studies in the ESL and ABE Classroom. There were 15 respondents. Comments were all positive, such as, the workshop presented child labor issues and other problems common to different worker populations, it showed what unions can accomplish as an empowering unit, the workshop provided good labor study lessons for classroom use, the procedures demonstrated good ways to bring the experiences of the adult union member into the classroom, and participants learned about the problems in the lives of students. Respondents also saw the value of student participants in practicing their language skills during the discussion.

Workshop 9, Immigrant Workers: Why We need to Build a Community of Mutual Support in an Educational Program, had no returned questionnaires.

Workshop 10, College Bilingual Program of the Center for Worker Education: A New Opportunity for Immigrant Workers, had five responses. Respondents indicated that they had learned how to get information about college bilingual programs.

Workshop 11, Parents Taking an Active Role in the Children's Education, had three responses. These concerned the need to work together with the school, to know what conflict there is in schools and what changes are needed in the educational system.

Workshop 12, Technology and the Workplace, had three responses, but little information was given on those questionnaires. Workshop 13, Decoding the Workplace, had two responses that also gave little feedback.

Workshop 14, Examining Student/Teacher Assumptions about Learning, had three responses. Participants felt that information from the student participants had helped them to see what experiences and expectations would be valuable in working

together in the classroom, and that with such a format students could gain more confidence and learn better.

Workshop 15, Using Writing to Develop a Thematic Curriculum, had three responses. The respondents were positive about their experiences, saying that they learned how to develop curriculum around personal events and stories, and that this was a new perspective for teaching ESL classes.

Workshop 16, Working and Learning Together, had 15 responses. Respondents were generally positive about how to use role playing in creating a student-centered classroom. They learned how students and teachers can work together, and felt that it was both motivating and important in bringing more oral language into the classroom. The workshop format itself had many positive comments.

Workshop 17, Problem Solving, had 14 responses. Respondents commented on the enthusiasm of the student participants in presenting techniques for resolving problems, and many thought the techniques would be useful for their own students. Some felt motivated by participating in the workshop and others felt that the techniques were applicable to content area subjects in a holistic way.

Workshop 18 was combined with Workshop 8, and was reviewed above.

Results from Interviews. All of the staff interviewed had participated in the conference by planning and giving workshops. The general reaction to the conference was positive and enthusiastic. A number of positive outcomes were cited by those interviewed. The format of pairing students and teachers as a team to present problems and issues was seen as mutually beneficial. It was good experience for both in the preparation phase when the team conceptualized and organized their presentations. It was felt that all participants became more active in defining and clarifying their experiences. The audience also participated actively and most seemed engaged in the discussions. It was helpful to all to examine the issues presented from various viewpoints.

At a different level, and considered important by several staff members, was that the conference brought a sense of community to the participants and helped them to see the context of the Consortium's city-wide programs. Participants could see the student-centered philosophy of the programs as it was actually implemented into the curriculum. It also made them aware of the range of available resources within the Consortium.

The staff also commented that many teachers had used the conference for discussion and writing assignments in later classes, with some success reported.

A few questions were raised about the format of future conferences. Adequate preparation for the students participating in workshops is important so that they will have the confidence to present well. It is also important that students and teachers work collaboratively, rather than having teachers dominate the planning and presentation. The latter was viewed as a delicate matter at times. Also, some staff members felt that the hour

allowed for the workshop precluded participation in depth by the teachers and students in the audience.

Summary

The task of this evaluation was to estimate the quality of the teacher training programs, based on interviews with the staff and on participants' evaluations of the workshops and conference. No observational data were gathered, nor were any students interviewed.

Teacher Training Programs

The Consortium staff oversees a large and complex educational enterprise. This enterprise shares many of the characteristics of other urban educational systems, in that both teachers and students have only a part-time commitment to the literacy programs. In addition, there is no centralized " campus" for classes. For these reasons, it is not surprising that teacher training is an important and integral component of the local Unions' programs. The Directors and their staff members commit large segments of their time to structured training activities as well as to informal contacts with teachers.

The more dominant reason for this emphasis, however, stems from the complex implementation necessary to establish literacy learning through a community effort, involving both teachers and students in mutual collaboration. Teachers need familiarization with a new framework, and need, as well, strong support as they begin to involve themselves with an approach to learning which involve collaboration in language based classrooms. They also need time for questioning and discussion as they work out their own roles in the classroom. To maintain that level of teacher involvement, continual support is required from the Union community, including the support of peer teachers as well as of the educational staff.

The staff members of the four Union programs show strong commitment to the educational philosophy of the Consortium. The principles contained in this philosophy include (a) encouragement of active student participation in their learning and building of student empowerment through learning, (b) attempts to build a community of learning embracing both students and teachers, and (c) creation of a holistic and multilevel literacy approach using flexible materials and procedures to develop and support teacher performance. These endeavors are greatly enhanced by the commitment and hard work of the staff members themselves, whose enthusiasm for their tasks and optimism for student success can only be assessed as positive forces in the achievements seen to date.

At the ACTWU program, the staff provides many opportunities for their teachers to become more autonomous in their classes. Many of the needs accompanying the recent program changes, such

as development of a comprehensive teacher support system, access to a large library of curriculum resources, and provision for workshops, have already been anticipated and have been met. The staff is now attempting to find a better vehicle for assessment of teacher and classroom functioning, and they are testing formats that have been created as the result of earlier tryouts. The overall impression of the staff is that they have used their own resources well in developing their programs. They seem well aware of the problems in their teacher training program, and they have plans for working through them.

The ILGWU staff is also clear about what shape their programs are to take, and the staff seems to function well as a team in resolving their problems and issues. Their approach to learning shows a firm commitment to the overall Consortium philosophy. They have developed an excellent curriculum resource bank as well as a systematic information delivery system for their teachers. A well-organized teacher development and support system exists.

The Teamsters Local 237 program is in transition, and the Director is well aware of its present problems and those that may arise as the teachers begin to adapt to a student-centered curriculum. The Director has a clear set of priorities for strengthening the program, in that she first wishes to restructure environment, and then wishes to motivate her teachers to take more active roles in bringing about needed curriculum changes. Other priorities, such as developing more student participation, have been made contingent on success in achieving the first priorities.

The UAW 65 program has focused on student needs, with an aim to helping students to develop individualized learning environments for themselves. This program has moved away from more traditional literacy curricula by providing GED programs without entrance requirements. Teacher development is viewed within the context of that focus. Informal support for teachers is stressed, although there are also structured opportunities for training and discussion.

Some general comments may be in order concerning some problems perceived in reviewing the various staff efforts. One concern is the combined technical and language-arts program. This is a new step in literacy education and the teams in these programs need to understand and develop more ways to work collaboratively. Strategies aimed at technical and language aspects of the curriculum need to be developed, discussed, and implemented. Students must understand the approach and give equal weight to the technical and language aspects of the program. In addition, team members must develop strategies for working collaboratively.

Teacher communication and collaboration should continue to be a priority among and within the unions. Several programs have made good progress in this area, but more pilot efforts are needed. Also, some explicit recognition of teacher networks as a means of staff development may help to spur more use and development in this area.

The Consortium's philosophy and the manner in which it is implemented by each union is of prime importance to the students and teachers in this program. The staff's commitment to and active efforts to implement such principles must continue to be supported with students and teachers by both the Consortium and the unions. Explicit discussion and demonstration, combined with examples which help define the boundaries of the program may further the involvement the union staffs wish to encourage.

The most complex and perhaps most central problem to be resolved concerns the roles of teachers and students in defining, developing and delivering the curriculum within a student-centered framework. There is little precedence set for such procedures, either from the literature or from the past experiences of any similar, large-scale program. How is responsibility allocated? How are teacher's skills used to build on student knowledge and information? How are student and teacher roles perceived? Are students' immediate needs adequate as a basis for the curriculum? How is a broadening of educational goals accomplished?

Other related questions are, how does one develop collaborative efforts among students and teachers? What safeguards could be built in so as not to threaten teachers unduly? It is of course equally important to encourage students to participate effectively. Should they also be involved in deciding curriculum structure, choice of learning procedures and performance standards? Should they as well participate in monitoring each other? Should the local needs of the student participants define the educational delivery system or should there be some more general guidelines for all Union programs? The need for program definition, of course, is not unique to a student-centered curriculum and should be considered as integral to the development of the program.

Centrally-sponsored Staff Training

The three workshops and conference that were evaluated were designed to address perceived needs in the various segments of the literacy programs. All conferences were successful according to the evaluations and to staff feedback. The GED and the Basic Skills Training Workshop, however, were judged to be somewhat less effective than the others by participants. Findings for each workshop and the conference will be summarized below.

The ACBE workshop for ESL teachers provided new information and techniques for student-centered classes, as well as giving insights about how collaborative procedures positively motivate students for achievement. Both the demonstration aspects and the opportunity for teacher exchange were appreciated. Mixing of students and teachers at the workshop was successful. Teachers asked for more training and support to implement changes in their own classroom. Staff members who attended the workshop felt that the facilitator provided an excellent demonstration of collaborative education, so much so that two of them were able to adapt the methods within their union programs for their own teachers.

The GED workshop elicited common reactions from both the teachers and the staff participants, that the concepts and procedures that were presented looked promising but they were not presented in a manner that led them to be fully understood or to be readily useable in other classes. Teachers were hesitant both to adapt the concept of heterogeneous grouping in GED classes, as well as to perceive themselves as fully competent to conduct such classes. They requested more guided preparation if such classes were formed.

The Workplace Basic Skills Training Workshop was judged to be well-presented and of high quality, but teachers mentioned the need for more demonstrations, participant discussion, and time for idea-sharing. One concern was that the facilitator had not explicitly connected the curriculum of the program to the participants' own class needs.

The Consortium's conference was an ambitious undertaking, with 18 workshops that showcased various programs and issues from the Union programs. Although each workshop was evaluated separately, the overall consensus of both workshop presenters as well as student and teacher participants was for high ratings. Participants cited having gained insight, information and new perspectives from sessions attended. Gains in motivation and commitment to the Consortium programs were also cited often. Discussion and sharing with other participants was mentioned as a positive outcome.

The staff were also uniformly positive about their own participation, as well as relating similar reactions from students and teachers attending their workshops. They cited the mutual benefit of student-teacher collaborative efforts in presenting workshops. They also mentioned that participants gained a wider exposure to the Consortium's programs as a whole, as well as opportunity to see the philosophy underlying the programs in action. Some minor suggestions for future modifications were made, but none seemed to lessen the enthusiasm all felt for the conference format.

General Comments

The efforts of the Consortium's staff members to provide teacher training at both the local and the central level are multifaceted and broad based, and have resulted in effective and flexible programs, as reported by those interviewed for this evaluation. The early attempts to move toward a student-centered, holistic curriculum have by and large resulted in its firm establishment in the programs. In those programs, attention is now focused on developing procedures for program development and implementation by the teacher and students. Some areas still need better articulation, but the staff members seem well able to resolve those issues with more time and effort. The larger issue of providing clear working definitions of teacher and student roles within the student-centered approach remains as a future challenge to the Consortium staff.

In conclusion, the staff development programs described here have resulted from collaborative planning, tryout, and revision

of multi-level activities and curriculum, as well as from continual dialogue among members of the staff as to the best representation of literacy experiences for their students. Their considerable efforts have produced development programs that are expected to evolve even more as both their students and teachers take more active roles in the literacy learning process. Although there are still issues to be resolved and activities to be made more effective, the strength of the work of the staff members is clearly seen in the documentation presented in the report. Staff members of the Consortium for Worker Education are to be commended for their innovative efforts in attempting to create a learning environment in which both teachers and students may thrive.